



Mojave Desert Air Quality Management District

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Visit our web site: <http://www.mdaqmd.ca.gov>

Brad Poiriez, Executive Director

February 8, 2018

Carol Sutkus
State of California
Environmental Protection Agency
Air Resources Board
P. O. Box 2815
Sacramento, California 95812

Project Title: Amendment of MDAQMD Rule 1114 – *Wood Products Coating Operations*

Dear Ms. Sutkus:

The Mojave Desert Air Quality Management District (MDAQMD) requests that the California Air Resources Board submit amended Rule 1114 – *Wood Products Coating Operations*, to the United States Environmental Protection Agency (USEPA) for inclusion in the State Implementation Plan (SIP).

The amendments to Rule 1114 – *Organic Solvent Degreasing Operations* are necessary to satisfy 42 U.S.C. §§7511a (FCAA §182) which requires that ozone non-attainment areas implement Reasonably Available Control Technology (RACT) for sources that are subject to Control Technology Guidelines (CTG) and for major sources of ozone precursors.

The District requests CARB submit to USEPA the proposed amendments to Rule 1114 to replace the SIP versions in effect in the San Bernardino County portion of the MDAB and the Blythe/Palo Verde Valley portion of Riverside County. While not specifically mentioned in the Direct Final Rule for the 11/25/96 version of Rule 1114 (63 FR 44132, 08/18/98), the District assumes that the approval action was for both the San Bernardino County portion of the MDAB and the Blythe/Palo Verde Valley portion of Riverside County, and that SCAQMD Rule 1136 – *Wood Furniture and Cabinet Coatings* was thereby removed from the SIP for the Blythe/Palo Verde Valley portion of Riverside County. (please refer to Section (F) of the Staff Report for a complete SIP History and Analysis discussion).

If you have any questions regarding this submittal, please contact me at (760) 245-1661, extension 6726, or Tracy Walters at extension 6122. Please note that all documents required for a complete submission were sent electronically on February 8, 2018.

Sincerely,

A handwritten signature in black ink, appearing to read "Alan J. De Salvio".

Alan J. De Salvio
Deputy Director – Mojave Desert Operations

AJD/tw

CARB SIP Submittal Request MD Rule 1114 020818

CALIFORNIA AIR RESOURCES BOARD

SIP COMPLETENESS CHECKLIST
(Electronic Format)

*** TO BE COMPLETED BY DISTRICT AND RETURNED TO ARB ***

All rules submitted to the EPA as State Implementation Plan (SIP) revisions must be supported by certain information and documentation for the rule packages to be deemed complete for review by the EPA. Rules will not be evaluated for approvability by the EPA unless the submittal packages are complete. To assist you in determining that all necessary materials are included in rules packages sent to the ARB for submittal to the EPA, please fill out the following form and include it with the rule package you send ARB. See the ARB's Guidelines on the Implementation of the 40 CFR 51, Appendix V, for a more detailed explanation than is provided here. Adopted rules and rule amendments should be checked against U.S. EPA's Guidance Document for Correcting Common VOC & Other Rule Deficiencies (Little Blue Book, August 21, 2001) to ensure that they contain no elements which will result in disapproval by EPA.

District: Mojave Desert Air Quality Management District

Rule No: 1114

Rule Title: Wood Products Coating Operations

Date Adopted or Amended: January 22, 2018

ADMINISTRATIVE MATERIALS

Note: All documents should be in electronic format. Items that have signatures, initials, or stamps may be scanned.

<u>Attached</u>	<u>Not Attached</u>	<u>N/A</u>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>COMPLETE COPY OF THE RULE:</u> Provide an unmarked copy of the entire rule as adopted or amended by your District Board.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>UNDERLINE AND STRIKEOUT COPY OF THE RULE:</u> If an amended rule, provide a complete copy of the rule indicating in underline and strikeout format all language which has been added, deleted, or changed since the rule was last adopted or amended. (See Staff Report Appendix A)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>COMPLETE COPY OF THE REFERENCED RULE(S):</u> For any rule which includes language specifically referencing another rule, a copy of that other rule must also be submitted, unless it has already been submitted to EPA as part of a previous SIP submittal.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>PUBLIC NOTICE EVIDENCE:</u> Include a copy of the local newspaper clipping certification(s), stating the date of publication, which must be at least 30 days before the hearing. As an alternative, include a copy of the actual published notice of the public hearing as it appeared in the local newspaper(s). In this case, however, enough of the newspaper page must be included to show the date of publication. The notice must specifically identify by title and number each rule adopted or amended. (See Staff Report Appendix B)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>RESOLUTION/MINUTE ORDER:</u> Provide the Board Clerk certified resolution or minute order. This document must include certification that the hearing was held in accordance with the information in the public notice. It must also list the rules that were adopted or amended, the date of the public hearing, and a statement of compliance with California Health and Safety Code Sections 40725-40728 (Administrative Procedures Act).
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>PUBLIC COMMENTS AND RESPONSES:</u> Submit copies of written public comments made during the notice period and at the public hearing. Also submit any written responses prepared by the District staff or presented to the District Board at the public hearing. A summary of the public comments and responses is adequate. If there were no comments made during the notice period or at the hearing, please indicate N/A to the left. (See Staff Report Appendix C)

SIP COMPLETENESS CHECKLIST
(Electronic Format)

*** TO BE COMPLETED BY DISTRICT AND RETURNED TO ARB ***

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|-------------------------------------|--------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <u>RULE EVALUATION FORM:</u> See instructions for completing the Rule Evaluation Form and the accompanying sample form. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>NON-EPA TEST METHODS:</u> Attach all test methods that are referenced in your rule that do not appear in 40 CFR 51, 60, 61, 63, or have not been previously submitted to EPA. EPA methods used in other media such as SW846 for solid waste are not automatically approved for air pollution applications. Submittal of test methods that are not EPA-approved should include the information and follow the procedure described in Region 9's "Test Method Review & Evaluation Process." |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>MODELING SUPPORT:</u> Provide if appropriate. In general, modeling support is not required for VOC and NOx rules to determine their impacts on ozone levels. Modeling is required where a rule is a relaxation that affects large sources (≥ 100 TPY) in an attainment area for SO ₂ , directly emitted PM ₁₀ , CO, or NO _x (for NO ₂ purposes). In cases where EPA is concerned with the impact on air quality of rule revisions which relax limits or cause a shift in emission patterns in a nonattainment area, a reference back to the approved SIP will be sufficient provided the approved SIP accounts for the relaxation and provided the approved SIP used the current EPA modeling guidelines. If current EPA modeling guidelines were not used, then new modeling may be required. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <u>ECONOMIC AND TECHNICAL JUSTIFICATION FOR DEVIATIONS FROM EPA POLICIES:</u> The District staff report or other information included with the submittal should discuss all potential relaxations or deviations from RACT, RACM, BACT, BACM, enforceability, attainment, RFP, or other relevant EPA requirements. This includes, for example, demonstrating that exemptions or emission limits less stringent than the presumptive RACT (e.g., a CTG) meet EPA's 5 percent policy, and demonstrating that all source categories exempted from a RACM/BACM rule are de minimus according to EPA's RACM/BACM policy. (See Staff Report) |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <u>ADDITIONAL MATERIALS:</u> Provide District staff reports and any other supporting information concerning development of the rule or rule changes. This information should explain the basis for all limits and thresholds contained in the rule. |

APCD/AQMD RULE EVALUATION FORM – Page 1
(Electronic Format)**I. GENERAL INFORMATION**District: Mojave Desert Air Quality Management DistrictRule No(s): 1114 Date adopted/Amended/Rescinded: Amended 01/22/2018Rule Title(s): Wood Products Coating OperationsDate Submitted to ARB: 02/08/2018If an Amended Rule, Date Last Amended (or Adopted): 11/25/1996Is the Rule Intended to be Sent to the U.S. EPA as a SIP Revision? ☒ Yes ☐ No (If No, do not complete remainder of form)District Contact: Tracy Walters Phone Number: (760) 245-1661 x6122 E-mail Address: twalters@mdaqmd.ca.govNarrative Summary of New Rule or Rule Changes: ☐ New Rule ☒ Amended Rule

The amendments to Rule 1114 are necessary to satisfy 42 U.S.C. §§7511a (FCAA §182) which requires that ozone non-attainment areas implement RACT for sources that are subject to CTGs and for major sources of ozone precursors. The District does not currently have sources meeting the threshold in the CTG, but does have an existing RACT rule. Additionally, the District is amending this rule to satisfy a prior commitment to implement the provisions of H&S Code §39614(d) (expired by its own terms on January 1, 2011) which required the adoption of readily available, feasible and cost-effective control measures for Particulate Matter from a list of potential local control measures promulgated by CARB. The amendments update rule definitions; VOC content; transfer efficiency requirements; VOC content for strippers and surface preparation materials; work practices; control device efficiency; and test methods.

Pollutant(s) Regulated by the Rule (Check): ☒ ROG ☐ (NO_x) ☐ SO₂
☐ (CO) ☐ PM ☐ TAC (name): _____**II. EFFECT ON EMISSIONS**

Complete this section ONLY for rules that, when implemented, will result in quantifiable changes in emissions. Attach reference(s) for emission factor(s) and other information. Attach calculation sheet showing how the emission information provided below was determined.

Net Effect on Emissions: ☐ Increase ☐ Decrease ☒ N/AEmission Reduction Commitment in SIP for this Source Category: N/AInventory Year Used to Calculate Changes in Emissions: N/A Area Affected: N/AFuture Year Control Profile Estimate (Provide information on as many years as possible):
N/A

APCD/AQMD RULE EVALUATION FORM - Page 2
(Electronic Format)

Baseline Inventory in the SIP for the Control Measure: N/A

Emissions Reduction Commitment in the SIP for the Control Measure: N/A

Revised Baseline Inventory (if any): N/A

Revised Emission Reduction Estimate (if developed): N/A

Note that the district's input to the Rule Evaluation Form will not be used as input to the ARB's emission forecasting and planning.

III. SOURCES/ATTAINMENT STATUS

District is: ☐ Attainment ☐ Nonattainment ☒ Split

Approximate Total Number of Small (<100 TPY) Sources Affected by this Amendment: 5

Percent in Nonattainment Area: 100%

Number of Large (\geq 100 TPY) Sources Controlled: 0 Percent in Nonattainment Area: 0%

Name(s) and Location(s) (city and county) of Large (\geq 100 TPY) Sources Controlled by Rule (Attach additional sheets as necessary): N/A

IV. EMISSION REDUCTION TECHNOLOGY

Does the Rule Include Emission Limits that are Continuous? ☐ Yes ☒ No

If Yes, Those Limits are in Section(s) N/A of the Rule.

Other Methods in the Rule for Achieving Emission Reductions are: VOC limits, control device efficiency, work practices, surface preparation and cleanup solvent limits.

V. OTHER REQUIREMENTS

The Rule Contains:

Emission Limits in Section(s): C Work Practice Standards in Section(s): C

Recordkeeping Requirements in Section(s): F Reporting Requirements in Section(s): F

APCD/AQMD RULE EVALUATION FORM - Page 3
(Electronic Format)

VI. IMPACT ON AIR QUALITY PLAN

☒ No Impact ☐ Impacts RFP ☐ Impacts attainment

Discussion: There are no potential adverse environmental impacts of compliance with the adoption of Rule 1114. Rule 1114 will impose additional controls on VOCs, control device efficiency, work practices, surface preparation and cleanup solvent VOC limits.

RESOLUTION NO. 18-04

**A RESOLUTION OF THE GOVERNING BOARD OF THE MOJAVE
DESERT AIR QUALITY MANAGEMENT DISTRICT MAKING FINDINGS,
CERTIFYING THE NOTICE OF EXEMPTION AMENDING RULE 1114 – WOOD
PRODUCTS COATING OPERATIONS AND DIRECTING STAFF ACTIONS.**

On January 22, 2018, on motion by Member **BARBARA RIORDAN**, seconded by
Member **CARMEN HERNANDEZ**, and carried, the following resolution is adopted:

WHEREAS, the Mojave Desert Air Quality Management District (MDAQMD or
District) has authority pursuant to California Health and Safety Code (H&S Code) §§40702,
40725-40728 to adopt, amend or repeal rules and regulations; and

WHEREAS, the Federal Clean Air Act (FCAA) requires areas designated non-
attainment and classified moderate and above to implement Reasonably Available Control
Technology (RACT) for sources subject to Control Techniques Guidelines (CTG) documents
issued by United States Environmental Protection Agency (USEPA) and for “major sources”
of Volatile Organic Compounds (VOCs) and oxides of nitrogen (NO_x) which are ozone
precursors; and

WHEREAS, the MDAQMD adopted the *2015 8-Hour Reasonably Available Control
Technology – State Implementation Plan Analysis (RACT SIP Analysis)* in February, 2015
which committed to amending Rule 1114 – *Wood Products Coating Operations* to current
Federal RACT; and

WHEREAS, the MDAQMD has a wood products coating operations rule which was
amended November 25, 1996 and approved as RACT into the SIP in 1998 (63 FR 44132,
08/18/1998); and

WHEREAS, this rule is subject to the CTG titled *Control of Volatile Organic
Compound Emissions from Wood Furniture Manufacturing Operations* (EPA-453/R-96-007,
April 1996) and the CTG titled *Control Techniques Guidelines: Industrial Cleaning Solvents*
(EPA 453/R-06-001, September 2006); and

WHEREAS, this source category is also subject to two additional CTGs titled
Control of Volatile Organic Emissions from Existing Stationary Sources – Volume VII:
Factory Surface Coating of Flat Wood Paneling (EPA 450/2-78-032, June 1978) and *Control*

RESOLUTION NO. 18-04

1 *Techniques Guidelines for Flat Wood Paneling Coatings (EPA 453/R-06-004, September*
2 *2006)*, but since there are no flat wood paneling operations within the Districts jurisdiction
3 Federal Negative Declarations were adopted for the two flat wood paneling coating CTGs on
4 February 23, 2015 as part of the 2015 RACT SIP analysis adoption; and

5 **WHEREAS**, the District has several facilities that primarily coat wood products and
6 some additional facilities that may coat wood products as part of their operations; and

7 **WHEREAS**, there are no current facilities that meet the specific applicability
8 threshold of the CTG titled *Control of Volatile Organic Compound Emissions from Wood*
9 *Furniture Manufacturing Operations* (sources located in nonattainment areas that emit, or
10 have the potential to emit, 25 tons/year or more of VOCs); and

11 **WHEREAS**, the MDAQMD is proposing to update Rule 1114 – *Wood Products*
12 *Coating Operations* to reflect current federal RACT because it has an existing RACT rule;
13 and

14 **WHEREAS**, additionally, the provisions of former H&S Code §39614(d) required
15 the adoption of certain control measures for Particulate Matter (PM) from a list promulgated
16 by the California Air Resources Board (CARB) contained in the *Proposed List of Measures*
17 *to Reduce Particulate Matter – PM10 and PM2.5 (Implementation of Senate Bill 656, Sher*
18 *2003)*; and

19 **WHEREAS**, former H&S Code §39614(d) (expired by its own terms on January 1,
20 2011) required the adoption of the most readily available, feasible and cost-effective local
21 control measures for PM as contained on a list developed by CARB; and

22 **WHEREAS**, this list required the adoption of Reasonably Available Control
23 Measures (RACM) for PM; and

24 **WHEREAS**, the proposed amendments to Rule 1114 satisfy both of these
25 requirements; and

26 **WHEREAS**, the proposed amendments to the Rule are necessary as indicated herein
27 and in the supporting documentation; and

28 **WHEREAS**, the MDAQMD has the authority pursuant to H&S Code §40702 to

RESOLUTION NO. 18-04

1 amend rules and regulations; and

2 **WHEREAS**, the proposed amendments to Rule 1114 are clear in that the meaning
3 can be easily understood by the persons impacted by the Rule; and

4 **WHEREAS**, the amendments to Rule 1114 are in harmony with, and not in conflict
5 with, or contradictory to existing statutes, court decisions, or state or federal regulations
6 because the proposed rule is consistent with the CTG provisions and other District rules
7 deemed to meet RACT; and

8 **WHEREAS**, when analyzed, the provisions of Rule 1114 were determined to be
9 readily available, feasible and cost-effective for Wood Products Coatings PM control
10 measures promulgated by CARB; and

11 **WHEREAS**, the District had committed to further evaluate the Wood Flat Stock
12 Coatings control measure but Rule 1114 is not applicable to wood flat stock, and the District
13 previously filed a FND for this type of operation, making this evaluation unnecessary; and

14 **WHEREAS**, the proposed amendments do not impose the same requirements as any
15 existing state or federal regulation because CTGs and the CARB *Proposed List of Measures*
16 *to Reduce Particulate Matter – PM10 and PM2.5 (Implementation of Senate Bill 656, Sher*
17 *2003)* (former H&S Code §39614(d)) are primarily guidance documents and not enforceable
18 in and of themselves and a rule is necessary to implement the applicable provisions of these
19 documents; and

20 **WHEREAS**, the proposed amendments to Rule 1114 are needed in order to satisfy 42
21 U.S.C. §§7511a (FCAA §182) which requires that ozone non-attainment areas implement
22 RACT for sources that are subject to CTGs and for major sources of ozone precursors, and
23 to satisfy a prior commitment to implement the provisions of H&S Code §39614(d) (expired
24 by its own terms on January 1, 2011) which required the adoption of readily available,
25 feasible and cost-effective control measures for Particulate Matter from a list of potential
26 local control measures promulgated by CARB ; and

27 **WHEREAS**, a public hearing has been properly noticed and conducted, pursuant to
28 H&S Code §40725, concerning the amendments to Rule 1114; and

RESOLUTION NO. 18-04

1 **WHEREAS**, a Notice of Exemption, a Categorical Exemption (Class 8, 14 CCR
2 §15308) for the proposed amendments to Rule 1114, completed in compliance with the
3 California Environmental Quality Act (CEQA), has been presented to the Governing Board
4 of the MDAQMD; each member having reviewed, considered and approved the information
5 contained therein prior to acting on the proposed amendments to Rule 1114 and the
6 Governing Board of the MDAQMD having determined that the proposed amendments will
7 not have any potential for resulting in any adverse impact upon the environment; and

8 **WHEREAS**, the Governing Board of the MDAQMD has considered the evidence
9 presented at the public hearing; and

10 **NOW, THEREFORE, BE IT RESOLVED**, that the Governing Board of the
11 MDAQMD finds that the amendments to Rule 1114 – *Wood Products Coating Operations*
12 are necessary, authorized, clear, consistent, non-duplicative and properly referenced; and

13 **BE IT FURTHER RESOLVED**, that the Governing Board of the MDAQMD
14 hereby makes a finding that the Class 8 Categorical Exemption (14 CCR §15308) applies and
15 certifies the Notice of Exemption for the proposed amendments to Rule 1114; and

16 **BE IT FURTHER RESOLVED**, that the Governing Board of the MDAQMD does
17 hereby adopt, pursuant to the authority granted by law, the proposed amendments to Rule
18 1114, as set forth in the attachments to this resolution and incorporated herein by this
19 reference; and

20 **BE IT FURTHER RESOLVED**, that this resolution shall take effect immediately
21 upon adoption, and that the Executive Office Manager is directed to file the Notice of
22 Exemption in compliance with the provisions of CEQA.

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PASSED, APPROVED and ADOPTED by the Governing Board of the Mojave Desert Air Quality Management District by the following vote:

AYES: *11* **MEMBER:** *CAMARGO, COLE, COX, DECONINCK,*
HERNANDEZ, LEONE, LOVINGOOD, PEREZ,
RAMOS, RIORDAN, SWANSON

NOES:	MEMBER:
ABSENT: 2	MEMBER: STANTON, WILLIAMS
ABSTAIN:	MEMBER:

STATE OF CALIFORNIA)
)
) SS:
COUNTY OF SAN BERNARDINO)

I, Deanna Hernandez, Senior Executive Analyst of the Governing Board of the Mojave Desert Air Quality Management District, hereby certify the foregoing to be a full, true and correct copy of the record of the action as the same appears in the Official Minutes of said Governing Board at its meeting of January 22, 2018.

Dan,
Senior Executive Analyst,
Mojave Desert Air Quality Management District

**MINUTES OF THE GOVERNING BOARD
OF THE MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
VICTORVILLE, CALIFORNIA**

AGENDA ITEM #20

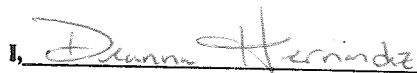
DATE: January 22, 2018

RECOMMENDATION: Conduct a public hearing to consider the amendment of Rule 1114 – *Wood Products Coating Operations*: a. Open public hearing; b. Receive staff report; c. Receive public testimony; d. Close public hearing; e. Make a determination that the California Environmental Quality Act (CEQA) Categorical Exemption applies; f. Waive reading of Resolution; g. Adopt Resolution making appropriate findings, certifying the Notice of Exemption, amending Rule 1114 and directing staff actions.

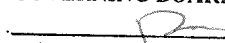
SUMMARY: Rule 1114 is proposed for amendment to satisfy 42 U.S.C. §§7511a (Federal Clean Air Act (FCAA) §182) which requires that ozone non-attainment areas implement Reasonably Available Control Technology (RACT) for sources that are subject to Control Techniques Guidelines (CTG) and for major sources of ozone precursors. Additionally, the District is amending this rule to satisfy a prior commitment to implement the provisions of Health & Safety (H&S) Code §39614(d) (expired by its own terms on January 1, 2011) which required the adoption of readily available, feasible and cost-effective control measures for Particulate Matter from a list of potential local control measures promulgated by the California Air Resources Board (CARB).

CONFLICT OF INTEREST: None

BACKGROUND: The FCAA requires areas designated non-attainment and classified moderate and above to implement RACT for sources subject to CTG documents issued by United States Environmental Protection Agency (USEPA) and for “major sources” of Volatile Organic Compounds (VOCs) and oxides of nitrogen (NO_x) which are ozone precursors. The Mojave Desert Air Quality Management District (MDAQMD or District) adopted the *2015 8-Hour Reasonably Available Control Technology – State Implementation Plan Analysis (RACT SIP Analysis)* in February, 2015 which committed to amending Rule 1114 – *Wood Products Coating Operations* to current Federal RACT. The MDAQMD has a wood products coating operations rule which was amended November 25, 1996 and approved as RACT into the SIP in 1998 (63 FR 44132, 08/18/1998). This rule is subject to the CTG titled *Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations* (EPA-453/R-96-007, April 1996) and the CTG titled *Control Techniques Guidelines: Industrial Cleaning Solvents* (EPA 453/R-06-001, September 2006). This source category is also subject to

I, 

**CUSTODIAN OF RECORDS OF MOJAVE DESERT AIR
QUALITY MANAGEMENT DISTRICT, HEREBY CERTIFY
THE FOREGOING TO BE A FULL, TRUE AND CORRECT
COPY OF THE RECORD OF THE ACTION AS THE SAME
APPEARS IN THE OFFICIAL MINUTES OF SAID
GOVERNING BOARD MEETING**


MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT.

**MINUTES OF THE GOVERNING BOARD
OF THE MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
VICTORVILLE, CALIFORNIA**

AGENDA ITEM #20

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two additional CTGs titled Control of Volatile Organic Emissions from Existing Stationary Sources – Volume VII: Factory Surface Coating of Flat Wood Paneling (EPA 450/2-78-032, June 1978) and Control Techniques Guidelines for Flat Wood Paneling Coatings (EPA 453/R-06-004, September 2006). Since there are no flat wood paneling operations within the Districts jurisdiction Federal Negative Declarations were adopted for the two flat wood paneling coating CTGs on February 23, 2015 as part of the 2015 RACT SIP analysis adoption.

The District has several facilities that primarily coat wood products and some additional facilities that may coat wood products as part of their operations. There are no current facilities that meet the specific applicability threshold of the CTG titled Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations (sources located in nonattainment areas that emit, or have the potential to emit, 25 tons/year or more of VOCs). The MDAQMD is proposing to update Rule 1114 – Wood Products Coating Operations to reflect current federal RACT because it has an existing RACT rule.

Additionally, the provisions of former Health & Safety Code (H&S Code) §39614(d) required the adoption of certain control measures for Particulate Matter (PM) from a list promulgated by CARB contained in the Proposed List of Measures to Reduce Particulate Matter – PM10 and PM2.5 (Implementation of Senate Bill 656, Sher 2003). Former H&S Code §39614(d) (expired by its own terms on January 1, 2011) required the adoption of the most readily available, feasible and cost-effective local control measures for PM as contained on a list developed by CARB. Furthermore, this list required the adoption of Reasonably Available Control Measures (RACM) for PM. The proposed amendments to Rule 1114 satisfy both of these requirements.

A Notice of Exemption, Categorical Exemption (Class8; 14 Cal. Code Reg. §15308) will be prepared by the MDAQMD for the amendment of Rule 1114 pursuant to the requirements of CEQA.

REASON FOR RECOMMENDATION: Health & Safety Code §§40702 and 40703 require the Governing Board to hold a public hearing before adopting rules and regulation. Also, 42 U.S.C. §7410(l) (FCAA §110(l)) requires that all SIP revisions be adopted after public notice and hearing.

REVIEW BY OTHERS: This item was reviewed by Karen Nowak, District Counsel as to legal form and by Alan De Salvio, Deputy Director – Mojave Desert Operations on or about January 8, 2018.

FINANCIAL DATA: No increase in appropriation is anticipated.

PRESENTER: Alan De Savio, Deputy Director – Mojave Desert Operations

**MINUTES OF THE GOVERNING BOARD
OF THE MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
VICTORVILLE, CALIFORNIA**

AGENDA ITEM #20

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ACTION OF THE GOVERNING BOARD

ADOPTED

Upon Motion by **BARBARA RIORDAN**, Seconded by **CARMEN HERNANDEZ**, as
approved by the following roll call vote:

Ayes: *11* **CAMARGO, COLE, COX, DECONINCK, HERNANDEZ, LEONE,
LOVINGOOD, PEREZ, RAMOS, RIORDAN, SWANSON**

Noes:

Absent: *2* **STANTON, WILLIAMS**

Abstain:

Vacant:

DEANNA HERNANDEZ, SENIOR EXECUTIVE ANALYST

BY 

Dated: JANUARY 22, 2018

**Ref. Resolution 18-04, "A RESOLUTION OF THE GOVERNING BOARD OF THE
MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT MAKING FINDINGS,
CERTIFYING THE NOTICE OF EXEMPTION, AMENDING RULE 1114 – *WOOD*
PRODUCTS COATING OPERATIONS AND DIRECTING STAFF ACTIONS."**

Rule 1114

Wood Products Coating Operations

(A) General

(1) Purpose

- (a) The purpose of this Rule is to limit the emission of Volatile Organic Compounds from Wood Products Coating Application Operations.

(2) Applicability

- (a) This Rule applies to Wood Products Coating Application Operations within the Mojave Desert Air Quality Management District.

(B) Definitions

The definitions contained in District Rule 102 – *Definition of Terms* shall apply unless the term is otherwise defined herein:

- (1) “Binders” – Non-volatile polymeric Organic Materials (resins) which form the surface film in Coating applications.
- (2) “Clear Sealer” – A Coating containing Binders, but not opaque pigments, which seals the Wood Products prior to application of the subsequent Coatings.
- (3) “Coating Application Operations” – A combination of Coating application steps which may include use of spray guns, flash-off areas, spray booths, ovens, conveyors, and/or other Equipment operated for the purpose of applying Coating materials and associated surface preparation and cleanup.
- (4) “Composite Wood” – A manufactured material consisting of tightly compressed wood fibers bonded with resins which includes, but is not limited to, particleboard, fiberboard and hardboard.
- (5) “Conversion Varnish” – A topcoat or sealer which is comprised of an alkyd or other resin, blended with amino resin, in a homogeneous liquid that, when acid catalyzed and applied, hardens by evaporation and polymerization.
- (6) “Crackle Lacquer” – A clear or Pigmented Topcoat intended to produce a cracked or crazed appearance when dry.

- (7) “Custom Replica Furniture” – New, made-to-order furniture that looks like antique furniture, rather than new furniture. It features detailed wood carvings and bruising of the wood to simulate antique furniture.
- (8) “Faux Finishes” – A finish intended to simulate a surface other than wood, including sand, slate, marble, metal, metal flake, or leather.
- (9) “Filler” – A material which is applied to a Wood Product, and whose primary function is to build up, or fill the voids and imperfections in the Wood Product to be coated.
- (10) “High-Solids Stains” – Stains containing more than one (1) pound of solids per gallon by weight.
- (11) “Imitation Wood Grain” – A hand applied finish that simulates the appearance of a specific natural wood grain.
- (12) “Leaf Finishes” – A finish used in conjunction with metal leaf or foil.
- (13) “Low-Solids Stains, Toners and Washcoats” – Stains, Toners and Washcoats containing one (1) pound of solids per gallon, or less, by weight.
- (14) “Low-Volume, Low-Pressure” (LVLP) – Spray Coating application Equipment with air pressure between 0.1 and 10.0 psig and air volume less than 15.5 cfm per spray gun and which operates at a maximum fluid delivery pressure of 50 psig.
- (15) “Medium Density Fiberboard (MDF) Coatings” – The initial Coating which is applied directly to the surface of MDF. MDF is a wood product composed of tightly compressed wood fibers bonded with resins, and has a density greater than 45 pounds per cubic foot.
- (16) “Mold-Seal Coating” – The initial Coating applied to a new mold or repaired mold to provide a smooth surface which, when coated with a mold release Coating, prevents products from sticking to the mold.
- (17) “New Wood Product” – A Wood Product which has not been previously coated. A Wood Product from which Coatings have been removed to repair flaws in initial Coating applications is a New Wood Product.
- (18) “Panel” – A flat piece of wood or Wood Products, usually rectangular, and used inside homes and mobile homes for wall decorations.
- (19) “Pigmented Primers, Sealers and Undercoats” – Opaque Coatings which contain Binders and colored pigments which are formulated to hide the wood surface, that are applied prior to the topcoat to provide a firm bond, level the wood product surface, or seal the wood product surface.

- (20) “Pigmented Topcoat” – A final opaque Coating which contains Binders and colored pigments, and is specifically formulated to hide the wood surface and form a solid protective film.
- (21) “Rate Per Day” – The amount applied between 12:00 a.m. and 11:59 p.m. on the same calendar day.
- (22) “Refinished Wood Product” – A post-consumer Wood Product which has had some or all of the Coatings removed, and to which new Coatings are applied in order to preserve or restore the post-consumer wood product to its original condition. A wood product from which Coatings have been removed to repair flaws in initial Coating applications is not a Refinished Wood Product.
- (23) “Shutter” – An exterior screen or cover for a window, usually hinged and often fitted with louvers. This includes non-functional Shutters.
- (24) “Simulated Wood Materials” – Materials, such as plastic, glass, metal, that are made to give a wood-like appearance or are processed like Wood Products.
- (25) “Stencil Coating” – An Ink or a pigmented Coating which is rolled or brushed onto a template or stamp in order to add identifying letters and/or numbers to Wood Products.
- (26) “Tint” – A colorant added in small quantities to a Stain to achieve a particular color for the finished product.
- (27) “Toner” – A Wash Coat which contains Binders and dyes or pigments to add Tint to a coated surface.
- (28) “VOC Content” – The weight of VOC per volume of Coating. VOC Content is VOC Regulatory, as defined in subsection (G)(4)(a)(i), for all Coatings except those in the Low Solids category. For Coating in the Low Solids category, the VOC Content is VOC Actual, as defined in subsection (G)(4)(a)(ii). If the Coating is a multi-component product, the VOC Content is VOC Content as mixed or catalyzed. If the Coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing.
- (29) “Wash Coat” – A Coating that contains no more than 1.0 pounds of solids per gallon, by weight, which is used to seal wood surfaces, prevent undesired staining, and control penetration.
- (30) “Wood Products” – Those surface coated room furnishings which include cabinets (kitchen, bath, and vanity), tables, chairs, beds, sofas, Shutters, art objects, and any other coated object made of solid wood and/or Composite Wood and/or made of Simulated Wood Material used in combination with solid wood or Composite Wood.

(C) Requirements

(1) Limits for VOC Content of Coatings & Adhesives for New Wood Products

- (a) Except as provided in subsections (C)(4) or (C)(5), no Person shall apply any Coatings to a New Wood Product if such materials have a VOC Content exceeding the applicable limits specified in Table 1. The VOC Content of Coatings, except Low-Solids Stains, Toners, Washcoats and Solvents shall be determined in accordance with subsection (G)(4)(a)(i) and (G)(2)(a). The VOC Content of Low-Solids Stains, Toners, Washcoats and Solvents shall be determined in accordance with subsection (G)(4)(a)(ii) and (G)(2)(a). VOC limits expressed in grams VOC per liter of Coating shall be used.

Table 1
VOC Content of Coatings and Adhesives for New Wood Products

Coating	Current Limit	On and After 01/31/2019
	g/l (lb/gal) Less Water and Less Exempt Compounds	g/L (lb/gal) Less Water and Less Exempt Compounds
General	N/A	275 (2.3)
Clear Sealers	275 (2.3)	275 (2.3)
Clear Topcoats	275 (2.3)	275 (2.3)
Pigmented Primers, Sealers and Undercoats	275 (2.3)	275 (2.3)
Pigmented Topcoats	275 (2.30)	275 (2.3)
Fillers	275 (2.3)	275 (2.3)
High-Solids Stains	350 (2.9)	350 (2.9)
Inks	500 (4.2)	500 (4.2)
Mold Seal	750 (6.3)	750 (6.3)
Multi-Colored Coatings	275 (2.3)	275 (2.3)
Low-Solids Stains, Toners and Washcoats	120 (1.0)	120 (1.0)
Adhesives	250 (2.1)	250 (2.1)
Conversion Varnish	N/A	550 (4.6)

(2) Limits for VOC Content of Coatings & Adhesives for Refinishing, Repairing, Preserving or Restoring Wood Products

- (a) Except as provided in subsections (C)(4) or (C)(5), no Person shall apply any Coatings to refinish, repair, preserve or restore a wood product if such materials have a VOC Content exceeding the applicable limits specified in Table 2. The VOC Content of Coatings, except Low-Solids Stains,

Toners, Washcoats and Solvents shall be determined in accordance with subsection (G)(4)(a)(i) and (G)(2)(a). The VOC Content of Low-Solids Stains, Toners, Washcoats and Solvents shall be determined in accordance with subsection (G)(4)(a)(ii) and (G)(2)(a). VOC limits expressed in grams VOC per liter of Coating shall be used.

Table 2
VOC Content of Coatings and Adhesives for Refinishing,
Repairing, Preserving or Restoring Wood Products

Coating	g/l (lb/gal) Less Water and Less Exempt Compounds
General	420 (3.5)
Clear Topcoats	680 (5.7)
Conversion Varnishes	550 (4.6)
Fillers	500 (4.2)
High-Solids Stains	700 (5.8)
Inks	500 (4.2)
Medium Density Fiberboard (MDF) Coatings	680 (5.7)
Mold-Seal Coating	750 (6.3)
Multi-Colored Coatings	680 (5.7)
Pigmented Coatings	600 (5.0)
Sealers	680 (5.7)
Low-Solids Stains, Toners and Washcoats	480 (4.0)
Any other Low Solids Coatings	480 (4.0)

- (3) Transfer Efficiency
- (a) A Person or Facility shall not apply Coatings to Wood Products subject to the provisions of this Rule unless the Coating is applied with properly operating Equipment, according to manufacturer's suggested guidelines, and by the use of one of the following methods:
- (i) Flow Coat;
 - (ii) Dip Coat;
 - (iii) High-Volume Low-Pressure (HVLP) spray;
 - (iv) Low-Volume Low-Pressure spray Equipment;
 - (v) Paint brush;
 - (vi) Hand roller;
 - (vii) Roll Coater;
 - (viii) Air-Assisted Airless Spray (for Touch-Up and Repair Coating only);
 - (ix) Electrostatic Application Equipment; or

- (x) Such other Coating application methods as are demonstrated to the Air Pollution Control Officer to have a Transfer Efficiency equal to or better than achieved by HVLP spraying and for which written approval of the Air Pollution Control Officer has been obtained.
- (4) Strippers, Surface Preparation, Clean-up Solvent and Equipment Cleaning
 - (a) The requirements of this Section shall apply to any Person using Solvent for surface preparation and cleanup.
 - (i) A Person shall not use an organic compound for surface preparation or cleanup, except Strippers, with a VOC Content in excess of 25 Grams of VOC Per Liter of Material (0.21 pounds per gallon).
 - (ii) A Person shall use closed, non-leaking, and non-absorbent containers for the storage or disposal of cloth or paper used for Solvent surface preparation and cleanup.
 - (iii) A Person shall store fresh or spent Solvent in closed containers.
 - (iv) A Person shall not use organic compounds for the cleanup of spray Equipment, including paint lines, unless Equipment for collecting the cleaning compounds and minimizing their evaporation to the Atmosphere is used.
 - (v) Spray gun nozzles only, may be soaked in Solvent-based materials for cleaning, provided the container is not more than five (5) gallons in size, and is kept tightly covered at all times except when accessing the container.
 - (vi) A Person shall not use Solvent based VOC-containing materials for the clean-up of spray Equipment used in Wood Products Coating Application Operations, unless the spray Equipment is disassembled and cleaned in an enclosed gun cleaner.
 - (b) A Person shall not use a Stripper on wood products unless:
 - (i) The Stripper contains less than 200 Grams of VOC Per Liter of Material; or
 - (ii) The VOC composite partial vapor pressure for the Stripper is 2 mm Hg (0.04 psia) or less at 68 °F (20 °C), as calculated pursuant to subsection (G)(5).
- (5) Add-On Control System
 - (a) In lieu of complying with the VOC Content limitations in subsection (C)(1), (C)(2), and/or (C)(4) above, air pollution Control Equipment with a capture and control system combined efficiency of at least 90 percent, as determined pursuant to subsections (G)(2)(b) and (G)(2)(c) of this Rule, may be used.

- (b) A Person using Control Equipment pursuant to (C)(5)(a) shall submit to the APCO for approval an Operation and Maintenance Plan for the proposed emission control device and emission collection system and receive approval prior to operation of the Control Equipment. Such Plan shall:
 - (i) Identify all key system operating parameters. Key system operating parameters are those necessary to ensure compliance with subsection (C)(5)(a), such as temperature, pressure, and/or flow rate; and
 - (ii) Include proposed inspection schedules, anticipated ongoing maintenance, and proposed recordkeeping practices regarding key operating system parameters.

(6) Prohibition of Specifications

- (a) Any Person shall not specify the use in the District of any Coating to be applied to any Wood Products subject to the provisions of this Rule that does not meet the limits and requirements of this Rule. The requirements of this paragraph shall apply to all written or oral contracts.

(7) Compliance Statement Requirement

- (a) The manufacturer of Coatings subject to this Rule shall include a statement of VOC Content as supplied on data sheets; including Coating components, expressed in grams per liter or pounds per gallon, excluding water and exempt Solvents.

(D) Exemptions

- (1) The provisions of subsections (C)(1)(a), (C)(2)(a), (C)(3)(a) and (C)(4) of this Rule shall not apply to:
 - (a) The use of Aerosol Coating Products.
 - (b) Facilities whose Rate Per Day of Coating use is less than one (1) gallon including any VOC-containing materials added to the original Coating as supplied by the manufacturer (only Coatings subject to this Rule shall be included in this calculation), and whose Wood Coating Application Operations do not emit more than 3 pounds of VOCs per day and not more than 200 pounds of VOCs per calendar year.
 - (c) Laminating of fiberglass, metal, or plastic sheets to wood Panels.
 - (d) The application of Coatings to musical instruments.
 - (e) The application of Coatings to billiard tables.

- (2) The provisions of subsection (C)(1)(a), and (C)(2)(a) shall not apply to Touch-Up and Repair Coatings or Stencil Coatings.
- (3) Any Facility classified as exempt or claiming to be exempt under this Section (D), shall meet the record keeping requirements of this Rule so as to be able to certify the exemption status.
- (4) Residential non-commercial operations are exempt from the provisions of this Rule.
- (5) Facilities which use of less than 55 gallons per year of Wood Products Coatings and/or Strippers (singly or in any combination) are exempt from the provisions of this Rule with the exception of Section (F).
- (6) Coatings used to provide the following finishes are exempt from the provision of subsection (C)(1)(a) and (C)(2)(a), provided that the records are maintained as specified in Section (F):
 - (a) Crackle Lacquers;
 - (b) Faux Finishes;
 - (c) Imitation Wood Grain;
 - (d) Leaf Finishes.
- (7) Tints applied to Stains in quantities not to exceed one (1) pint of Tint in any operating day are exempt from all the provisions of this Rule, provided that the records are maintained as specified in Section (F).

(E) Administrative Requirements

- (1) Rule 442 Applicability
 - (a) Any Coating, Coating Operation, or Facility which is exempt from all or a portion of the VOC Content limits of this Rule shall comply with the provisions of Rule 442 regulating those exempted activities unless compliance with the limits specified in this Rule are achieved.

(F) Monitoring and Records

- (1) Coating Records
 - (a) Any Person subject to this Rule shall comply with the following requirements:

- (i) The Person shall maintain and have available during an inspection, a current list of Coatings in use which provides all of the Coating data necessary to evaluate compliance, including the following information, as applicable:
 - a. Coating, catalyst, and reducer used.
 - b. Mix ratio of components used.
 - c. VOC Content of Coating as applied.
 - d. A data sheet, material list, or invoice giving material name, manufacturer, identification, material application and VOC Content.
 - (ii) The Person shall maintain records on a daily basis including:
 - a. Coating and mix ratio of components used in the Coating; and
 - b. Quantity of each Coating applied.
 - (iii) The Person shall maintain records on a daily basis showing the type and amount of Solvent and Stripper used for cleanup, surface preparation, and paint removal.
- (b) Notwithstanding the provisions of subsection (F)(1)(a), a Person or Facility which exclusively uses Coating formulations compliant with subsection (C)(1)(a) and (C)(2)(a) may maintain usage records on a monthly basis.
 - (c) Persons using Stains and/or Tints and subject to this Rule shall maintain records on a monthly basis that provide the following information:
 - (i) Name, description, container size and actual VOC Content of any Tints used to color Stains.
 - (ii) Records of any Tint use shall be maintained on a daily basis.

(2) Compliance Assurance Monitoring

- (a) Each Coating Application Operation subject to subparagraph (C)(1)(a) or (C)(2)(a) which is using air pollution abatement Equipment to meet the control requirement shall:
 - (i) Utilize Compliance Assurance Monitoring, as approved by the APCO. Each monitoring device(s), mechanism and/or technique shall be calibrated/maintained in a manner approved by the APCO; and
 - (ii) Maintain and produce daily records of key system operating parameters and maintenance procedures which will demonstrate continuous operation and compliance of the air pollution abatement Equipment during periods of emission-producing activities. Key system operating parameters are those necessary to ensure compliance with subsection (C)(5), such as temperatures, pressures and flow rates.

- (b) Compliance with subsection (C)(5) shall be determined by compliance testing as prescribed in subsections (G)(2)(b) and (c) and by evaluating Compliance Assurance Monitoring data.
- (3) All records for the previous five (5) year period maintained and produced pursuant to this Section shall be retained and available for inspection by the APCO upon request.

(G) Test Methods

- (1) A violation of the limits contained in this Rule, as determined by any one of these test methods, shall constitute a violation of this Rule.
- (2) The following specified test methods shall be used to determine compliance with the provisions of this Rule.
 - (a) Determination of VOC Content and solids content: Samples of Coatings and Solvent as specified in Section (C) shall be analyzed as prescribed by EPA Reference Method 24 – *Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings* for VOC Content and solids content (without correction for Exempt Compounds) and ASTM D4457-02(2008) - *Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph*, or ARB Method 432 – *Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings* (09/12/1989) for determination of emissions of Exempt Compounds. Perfluorocarbon compounds shall be assumed to be absent from a product or process unless a manufacturer or Facility Operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present in the product or process and provides a test method acceptable to EPA and ARB which can be used to quantify the specific compounds.
 - (b) Determination of Emissions: For any Owners and/or Operators who choose to comply with the provisions of Section (C)(1)(a) or (C)(2)(a) through the use of air pollution abatement Equipment, emission of VOCs shall be measured as prescribed by EPA Reference Method 25 – *Gaseous Nonmethane Organic Emissions* and EPA Reference Method 25A – *Determination of Total Gaseous Organic Concentration using a Flame Ionization Analyzer* for determination of VOC emissions (without correction for Exempt Compounds) and EPA Method 18 – *Volatile Organic Compounds by Gas Chromatography*, or ARB Method 422 – *Determination of Volatile Organic Compounds in Emissions from Stationary Sources (Exempt VOCs)* (12/13/1991) for measuring emission of Exempt Compounds.

- (c) Determination of Overall Control Efficiency: The Overall Control Efficiency of air pollution abatement Equipment shall be determined by a minimum of three sampling runs conducted according to USEPA's technical guidance document "Guidelines for Determining Capture Efficiency", January 9, 1995, and 40 CFR 51, Appendix M, Methods 204-204F, as applicable.
- (3) Demonstration of Transfer Efficiency of alternative application methods subject to subsection (C)(3)(a) shall be conducted in accordance with South Coast Air Quality Management District's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User" (May 24, 1989), and South Coast Air Quality Management District "Guidelines for Demonstrating Equivalency With District Approved Transfer Efficiency Spray Gun" September 26, 2002.
- (4) Calculation of VOC Content:
 - (a) For the purpose of determining compliance with the VOC Content limits in Section (C), the VOC Content of a Coating shall be determined by using the procedures in subsection (i) or (ii) below, as appropriate. If the manufacturer does not recommend thinning, the VOC Content must be calculated for the product as supplied. The VOC Content of a Tint Base shall be determined without Colorant that is added after the Tint Base is manufactured. Effective (1 year after date of adoption), if the Coating is a multi-component product, the VOC Content must be calculated as mixed or catalyzed. Effective (1 year after date of adoption), if the Coating contains Silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC Content must include the VOCs emitted during curing.
 - (i) Regulatory VOC Content – The weight of VOC per combined volume of VOC and Coating solids, shall be calculated by the following equation:

$$VOC_{Regulatory} = \frac{W_v - W_w - W_{ec}}{V_m - V_w - V_{ec}}$$

Where:

$VOC_{Regulatory}$ = Weight of VOC per liter of Coating, less water and less Exempt Compounds

W_v = Weight of all volatile compounds, in grams

W_w = Weight of water, in grams

W_{ec} = Weight of Exempt Compounds, in grams

V_m = Volume of Coating material, in liters
 V_w = Volume of water, in liters
 V_{ec} = Volume of Exempt Compounds, in liters

- (ii) Actual VOC Content – The weight (in grams) of VOC per liter of Wood Products Coating material is expressed as grams VOC per liter of material, and shall be calculated by the following equation:

$$VOC_{Actual} = \frac{W_v - W_w - W_{ec}}{V_m}$$

VOC_{Actual} = Weight of VOC per liter of Coating
 W_v = Weight of all volatile compounds, in grams
 W_w = Weight of water, in grams
 W_{ec} = Weight of Exempt Compounds, in grams
 V_m = Volume of Coating material, including any added VOC-containing Solvents or reducers but excluding any colorant added to Tint the base in liters

- (5) VOC Composite Partial Vapor Pressure:

$$PP_c = \frac{\sum_{i=1}^n (W_i)(VP_i)/(MW_i)}{\frac{W_w}{MW_w} + \frac{W_e}{MW_e} + \sum_{i=1}^n \frac{W_i}{MW_i}}$$

Where:

PP_c = VOC composite partial pressure at 68 °F (20 °C), in mm Hg
 W_i = Weight of the “I”_{th} VOC compound, in grams
 W_w = Weight of water, in grams
 W_e = Weight of Exempt Compounds, in grams
 MW_i = Molecular weight of the “I”_{th} VOC compound, in (g/g-mole)
 MW_w = Molecular weight of water, in (g/g-mole)

MW_e = Molecular weight of Exempt Compound, in (g/g-mole)

VP_i = Vapor pressure of the “I”_{th} VOC compound at 68 °F (20 °C), in mm Hg

- (6) Overall Control Efficiency (C.E.) shall be calculated using the following equations:

$$\text{Capture Efficiency (\%)} = \left(\frac{W_c}{W_e} \right) \times 100$$

Where:

W_c = Weight of VOC entering control device

W_e = Weight of VOC emitted from the source

$$\text{Control Device Efficiency (\%)} = \frac{(W_c - W_a)}{W_c} \times 100$$

Where:

W_c = Weight of VOC entering control device

W_a = Weight of VOC discharged from the control device

$$C.E. (\%) = \frac{(\text{Capture Efficiency}) \times (\text{Control Device Efficiency})}{100}$$

See SIP Table at <http://www.mdaqmd.ca.gov/>

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Mojave Desert
Air Quality Management District



Final
Staff Report
Amendments to
Rule 1114 – *Wood Products Coating Operations*

Amended on
January 22, 2018

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List of Acronyms

BACT	Best Available Control Technology
BARCT	Best Available Retrofit Control Technology
CARB	California Air Resources Board
CCAA	California Clean Air Act
CEQA	California Environmental Quality Act
CTG	Control Techniques Guidelines
FCAA	Federal Clean Air Act
H&S Code	California Health & Safety Code
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
NO _x	Oxides of Nitrogen
RACM	Reasonably Available Control Measures
RACT	Reasonably Available Control Technology
SCAQMD	South Coast Air Quality Management District
SIP	State Implementation Plan
SO _x	Oxides of Sulfur
TAC	Technical Advisory Committee
USEPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compounds

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STAFF REPORT

Rule 1114 – *Wood Products Coating Operations*

I. PURPOSE OF STAFF REPORT

A staff report serves several discrete purposes. Its primary purpose is to provide a summary and background material to the members of the Governing Board. This allows the members of the Governing Board to be fully informed before making any required decision. It also provides the documentation necessary for the Governing Board to make any findings, which are required by law to be made prior to the approval or adoption of a document. In addition, a staff report ensures that the correct procedures and proper documentation for approval or adoption of a document have been performed. Finally, the staff report provides evidence for defense against legal challenges regarding the propriety of the approval or adoption of the document.

II. EXECUTIVE SUMMARY

The Federal Clean Air Act (FCAA) requires areas designated non-attainment and classified moderate and above to implement Reasonably Available Control Technology (RACT) for sources subject to Control Techniques Guidelines (CTG) documents issued by United States Environmental Protection Agency (USEPA) and for “major sources” of Volatile Organic Compounds (VOCs) and oxides of nitrogen (NO_x) which are ozone precursors. The Mojave Desert Air Quality Management District (MDAQMD or District) adopted the *2015 8-Hour Reasonably Available Control Technology – State Implementation Plan Analysis (RACT SIP Analysis)* in February, 2015 which committed to amending Rule 1114 – *Wood Products Coating Operations* to current Federal RACT. The MDAQMD has a wood products coating operations rule which was amended November 25, 1996 and approved as RACT into the SIP in 1998 (63 FR 44132, 08/18/1998). This rule is subject to the CTG titled *Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations* (EPA-453/R-96-007, April 1996) and the CTG titled *Control Techniques Guidelines: Industrial Cleaning Solvents* (EPA 453/R-06-001, September 2006). This source category is also subject to two additional CTGs titled *Control of Volatile Organic Emissions from Existing Stationary Sources – Volume VII: Factory Surface Coating of Flat Wood Paneling* (EPA 450/2-78-032, June 1978) and *Control Techniques Guidelines for Flat Wood Paneling Coatings* (EPA 453/R-06-004, September 2006). Since there are no flat wood paneling operations within the Districts jurisdiction Federal Negative Declarations were adopted for the two flat wood paneling coating CTGs on February 23, 2015 as part of the 2015 RACT SIP analysis adoption.

The District has several facilities that primarily coat wood products and some additional facilities that may coat wood products as part of their operations. There are no current facilities that meet the specific applicability threshold of the CTG titled *Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations* (sources located in nonattainment areas that emit, or have the potential to emit, 25 tons/year or more of VOCs). The MDAQMD is proposing to update Rule 1114 – *Wood Products Coating Operations* to reflect current federal RACT because it has an existing RACT rule.

Additionally, the provisions of former Health & Safety Code (H&S Code) §39614(d) required the adoption of certain control measures for Particulate Matter (PM) from a list promulgated by the California Air Resources Board (CARB) contained in the *Proposed List of Measures to Reduce Particulate Matter – PM10 and PM2.5 (Implementation of Senate Bill 656, Sher 2003)*. Former H&S Code §39614(d) (expired by its own terms on January 1, 2011) required the adoption of the most readily available, feasible and cost-effective local control measures for PM as contained on a list developed by CARB. Furthermore, this list required the adoption of Reasonably Available Control Measures (RACM) for PM. The proposed amendments to Rule 1114 satisfy both of these requirements.

III. STAFF RECOMMENDATION

Staff recommends that the Governing Board of the Mojave Desert Air Quality Management District amend proposed Rule 1114 – *Wood Products Coating Operations* and approve the appropriate California Environmental Quality Act (CEQA) documentation. This action is necessary to satisfy 42 U.S.C. §§7511a (FCAA §182) which requires that ozone non-attainment areas implement RACT for sources that are subject to CTGs and for major sources of ozone precursors. This amendment also satisfies a prior commitment to implement the provisions of H&S Code §39614(d) (expired by its own terms on January 1, 2011) which required the adoption of readily available, feasible and cost-effective control measures for Particulate Matter from a list of potential local control measures promulgated by CARB.

The Governing Board of the Mojave Desert Air Quality Management District amended Rule 1114 – *Wood Products Coating Operations* at the January 22, 2018 Governing Board Meeting.

IV. LEGAL REQUIREMENTS CHECKLIST

The findings and analysis as indicated below are required for the procedurally correct amendments to Rule 1114 – *Wood Products Coating Operations*. Each item is discussed, if applicable, in Section V. Copies of related documents are included in the appropriate appendices.

FINDINGS REQUIRED FOR RULES & REGULATIONS:

- X Necessity
- X Authority
- X Clarity
- X Consistency
- X Nonduplication
- X Reference
- X Public Notice & Comment
- X Public Hearing

REQUIREMENTS FOR STATE IMPLEMENTATION PLAN SUBMISSION (SIP):

- X Public Notice & Comment
- X Availability of Document
- X Notice to Specified Entities (State, Air Districts, USEPA, Other States)
- X Public Hearing
- X Legal Authority to adopt and implement the document.
- X Applicable State laws and regulations were followed.

ELEMENTS OF A FEDERAL SUBMISSION:

- N/A Elements as set forth in applicable Federal law or regulations.

CALIFORNIA ENVIRONMENTAL QUALITY ACT REQUIREMENTS (CEQA):

- N/A Ministerial Action
- N/A Exemption
- X Negative Declaration
- N/A Environmental Impact Report
- X Appropriate findings, if necessary.
- X Public Notice & Comment

SUPPLEMENTAL ENVIRONMENTAL ANALYSIS (RULES & REGULATIONS ONLY):

- X Environmental impacts of compliance.
- N/A Mitigation of impacts.
- N/A Alternative methods of compliance.

OTHER:

- X Written analysis of existing air pollution control requirements
- N/A Economic Analysis
- X Public Review

V. DISCUSSION OF LEGAL REQUIREMENTS

A. REQUIRED ELEMENTS/FINDINGS

This section discusses the State of California statutory requirements that apply to the proposed amendments to Rule 1114. These are actions that need to be performed and/or information that must be provided in order to amend the rule in a procedurally correct manner.

1. State Findings Required for Adoption of Rules & Regulations:

Before adopting, amending, or repealing a rule or regulation, the District Governing Board is required to make findings of necessity, authority, clarity, consistency, non-duplication, and reference based upon relevant information presented at the hearing. The information below is provided to assist the Board in making these findings.

a. Necessity:

The amendments to Rule 1114 are necessary to satisfy 42 U.S.C. §§7511a (FCAA §182) which requires that ozone non-attainment areas implement RACT for sources that are subject to CTGs and for major sources of ozone precursors. The District does not currently have sources meeting the threshold in the CTG, but does have an existing RACT rule. Additionally, the District is amending this rule to satisfy a prior commitment to implement the provisions of H&S Code §39614(d) (expired by its own terms on January 1, 2011) which required the adoption of readily available, feasible and cost-effective control measures for Particulate Matter from a list of potential local control measures promulgated by CARB.

b. Authority:

The District has the authority pursuant to California Health and Safety Code (H & S Code) §40702 to adopt, amend or repeal rules and regulations.

c. Clarity:

The amendments to Rule 1114 are clear in that they are written so that the persons subject to the Rule can easily understand the meaning.

d. Consistency:

The amendments to Rule 1114 are in harmony with, and not in conflict with or contradictory to any state law or regulation, federal

law or regulation, or court decisions. The rule is consistent with the CTG provisions and other District rules deemed to meet RACT. When analyzed, the provisions of Rule 1114 were determined to be readily available, feasible and cost-effective for Wood Products Coatings PM control measures promulgated by CARB. The District had committed to further evaluate the Wood Flat Stock Coatings control measure. Rule 1114 is not applicable to wood flat stock, and the District previously filed a FND for this type of operation, making this evaluation unnecessary.

e. Nonduplication:

The amendments to Rule 1114 do not impose the same requirements as any existing state or federal law or regulation, or court decision. CTGs and the CARB *Proposed List of Measures to Reduce Particulate Matter – PM10 and PM2.5 (Implementation of Senate Bill 656, Sher 2003)* (former H&S Code §39614(d)) are primarily guidance documents and not enforceable in and of themselves. A rule is necessary to implement the applicable provisions of these documents.

f. Reference:

The District has the authority pursuant to H&S Code §40702 to adopt, amend or repeal rules and regulations.

g. Public Notice & Comment, Public Hearing:

Notice for the public hearing for the proposed amendments to Rule 1114 was published December 22, 2017. See Appendix “B” for a copy of the public notice. See Appendix “C” for copies of comments, if any, and District responses.

2. Federal Elements (SIP Submittals, Other Federal Submittals).

Submittals to USEPA are required to include various elements depending upon the type of document submitted and the underlying Federal law that requires the submittal. The information below indicates which elements are required for the proposed amendments to of Rule 1114 and how they were satisfied.

a. Satisfaction of Underlying Federal Requirements:

The FCAA requires areas designated non-attainment and classified moderate and above to implement RACT for sources subject to CTG documents issued by USEPA and for “major sources” of VOCs and NO_x that are ozone precursors. Because the District has an existing SIP rule for this CTG category, the District committed to adopting an updated RACT rule for wood products

coating operations. While the District does not have sources meeting the threshold in the CTGs it does an existing approved RACT rule. The proposed amendments are based on the CTGs and various district rules deemed as fulfilling RACT requirements, including but not limited to: San Diego County Air Pollution Control District Rule 67.11 – *Wood Products Coating Operations*; and, Placer County Air Pollution Control District Rule 236 – *Wood Products and Coating Operations*.

b. Public Notice and Comment:

Notice for the public hearing for the proposed amendments to Rule 1114 was published December 22, 2017. See Appendix “B” for a copy of the public notice. See Appendix “C” for copies of comments, if any, and District responses.

c. Availability of Document:

Copies of proposed amended Rule 1114 and the accompanying draft staff report were made available to the public on December 4, 2017. The proposed amendments were reviewed by the Technical Advisory Committee, a committee consisting of a variety of regulated industry and local governmental entities, on January 9, 2018. It was the consensus of the TAC to recommend submittal of Rule 1114 to the Governing Board for adoption.

d. Notice to Specified Entities:

Copies of proposed amended Rule 1114 and the accompanying draft staff report were sent to all affected agencies. The proposed amendments were sent to CARB and USEPA on December 4, 2017.

e. Public Hearing:

A public hearing to consider the amendments to Rule 1114 was held on January 22, 2018.

f. Legal Authority to Adopt and Implement:

The District has the authority pursuant to H&S Code §40702 to adopt, amend, or repeal rules and regulations and to do such acts as may be necessary or proper to execute the duties imposed upon the District.

g. Applicable State Laws and Regulations Were Followed:

Public notice and hearing procedures pursuant to H&S Code §§40725-40728 have been followed. See Section (V)(A)(1) above for compliance with state findings required pursuant to H&S Code §40727. See Section (V)(B) below for compliance with the required analysis of existing requirements pursuant to H&S Code §40727.2. See Section (V)(C) for compliance with economic analysis requirements pursuant to H&S Code §40920.6. See Section (V)(D) below for compliance with provisions of the CEQA.

B. WRITTEN ANALYSIS OF EXISTING REQUIREMENTS

H&S Code §40727.2 requires air districts to prepare a written analysis of all existing federal air pollution control requirements that apply to the same equipment or source type as the rule proposed for modification by the district.

The FCAA requires areas designated non-attainment for ozone and classified moderate and above to adopt and maintain RACT rules to control the emissions of VOCs and NO_x for categories which the USEPA has adopted a CTG and for all categories where there are major stationary sources of air pollution (42 U.S.C. §7511a(b)(2), FCAA 182(b)(2)). For purposes of the FCAA, portions of the District have been designated non-attainment for ozone and classified severe-17.

The MDAQMD has a wood products coating operations rule which was amended November 25, 1996 and approved as RACT into the SIP in 1998 (63 FR 644132, 08/18/1998). This rule is subject to the CTG titled *Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations* (EPA-453/R-96-007, April 1996) and the CTG titled *Control Techniques Guidelines: Industrial Cleaning Solvents* (EPA 453/R-06-001, September 2006). This source category is also subject to two additional CTGs titled *Control of Volatile Organic Emissions from Existing Stationary Sources – Volume VII: Factory Surface Coating of Flat Wood Paneling* (EPA 450/2-78-032, June 1978) and *Control Techniques Guidelines for Flat Wood Paneling Coatings* (EPA 453/R-06-004, September 2006). Since there are no flat wood paneling operations within the Districts jurisdiction Federal Negative Declarations were adopted for the two flat wood paneling coating CTGs on February 23, 2015 as part of the 2015 RACT SIP analysis adoption. The proposed amendments are based on the CTGs, and various district rules deemed as fulfilling RACT requirements, including but not limited to: San Diego County Air Pollution Control District Rule 67.11 – *Wood Products Coating Operations*; and, Placer County Air Pollution Control District Rule 236 – *Wood Products and Coating Operations*.

The District has several facilities that primarily coat wood products, and additional facilities that may coat wood products as part of their operations. There are no facilities that meet the specific applicability threshold of the CTG titled *Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations* but the

District has an existing RACT rule and the potential to have sources subject to the CTG applicability. Therefore, the District has chosen to update Rule 1114 to meet current federal RACT.

Former H&S Code §39614(d) required the MDAQMD to adopt the most readily available, feasible and cost-effective local control measures for PM as contained on a list developed by CARB. CARB identified on its list of local control measures two items related to wood products coating operations as potentially feasible. The District has evaluated the availability, feasibility and cost-effectiveness of applying those coating control measures related to metal parts and products coatings within the MDAQMD. The Proposed List of Measures to Reduce Particulate Matter – PM10 and PM2.5 (Implementation of Senate Bill 656, Sher 2003) approved by CARB November 18, 2004, Appendix C (SB 656 List of Air District Measures that Reduce Particulate Matter) identified two strategies for wood coating operations: Strategy 81 – *Wood Flat Stock Coatings*, directed the District to evaluate Rule 1114 against SCAQMD Rule 1104 as amended 08/13/99; and, Strategy 82 – *Wood Products Coatings* directed the District to evaluate Rule 1114 against SCAQMD Rule 1136 as amended 06/14/96. Strategy 81 was evaluated and it was determined that Rule 1114 is not applicable to wood flat stock and the District has no sources of this type making this evaluation and adoption of the recommended provisions unnecessary. The District has filed a FND for this type of operation. Strategy 82 was evaluated and it was determined that the control measures listed in the CARB document were implemented at the time of the analysis. Evaluation of these strategies meets the obligation to former H&S Code §39614(d).

C. ECONOMIC ANALYSIS

1. General

RACT is defined as the lowest emissions limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility (44 FR 53762, September 17, 1979). Rule 1114 is equivalent to rules that were determined by USEPA to fulfill RACT.¹ This determination by USEPA means that the provisions of Rule 1114 are, by definition, cost effective.

2. Incremental Cost Effectiveness

Pursuant to H&S Code §40920.6, incremental cost effectiveness calculations are required for rules and regulations which are adopted or amended to meet the California Clean Air Act (CCAA) requirements for Best Available Retrofit Control Technology (BARCT) or “all feasible measures” to control volatile compounds (VOCs), oxides of nitrogen (NOx) or oxides of sulfur (SOx). The amendment of Rule 1114 is not subject to incremental cost effectiveness calculations because it does not involve BARCT or “all feasible measures”.

¹ San Diego County Air Pollution Control District Rule 67.11 – *Wood Products Coating Operations* (78 FR 21538, 04/11/2013); and, Placer County Air Pollution Control District Rule 236 – *Wood Products and Coating Operations* (76 FR 71886, 11/21/2011).

D. ENVIRONMENTAL ANALYSIS (CEQA)

Through the process described below the appropriate CEQA process for the proposed amendments to Rule 1114 was determined.

1. The proposed amendments to Rule 1114 meet the CEQA definition of “project”. They are not “ministerial” actions.
2. The proposed amendments to Rule 1114 are exempt from CEQA review because the amendments will not create any adverse impacts on the environment. The proposed rule amendments are more stringent than the previous rule version. Because there is no potential that the amendments might cause the release of additional air contaminants or create any adverse environmental impacts, a Class 8 categorical exemption (14 Cal. Code Reg. §15308) applies. Copies of the documents relating to CEQA can be found in Appendix “D”.

E. SUPPLEMENTAL ENVIRONMENTAL ANALYSIS

1. Potential Environmental Impacts

There are no potential adverse environmental impacts of compliance with the adoption of Rule 1114. Rule 1114 will impose additional controls on VOCs, control device efficiency, work practices, surface preparation and cleanup solvent VOC limits.

2. Mitigation of Impacts

N/A

3. Alternative Methods of Compliance

N/A

F. PUBLIC REVIEW

See Staff Report Section (V)(A)(1)(g) and (2)(b), as well as Appendix “B”

VI. TECHNICAL DISCUSSION

A. SOURCE DESCRIPTION

Rule 1114 is applicable to wood products coating application operations, defined as room furnishings including cabinets (kitchen, bath and vanity), tables, chairs, beds, sofas, shutters, art objects, and any other coated object made of solid wood and/or composite wood and/or made of simulated wood material used in combination with solid wood or composite wood.

B. EMISSIONS

The amendments update rule definitions; VOC content; transfer efficiency requirements; VOC content for strippers and surface preparation materials; work practices; control device efficiency; and test methods.

C. CONTROL REQUIREMENTS

Please see section (C) of the rule (Appendix A) for control requirements.

The amendments to Rule 1114 – *Wood Products Coating Operations* do not cause the release of additional air contaminants or create any environmental impacts.

Section (C)(1) and (C)(2) have been modified to include separate limits for “New” and “Refinishing, Repairing, Preserving or Restoring” coating limits. This approach was approved in two district rules that were recently determined by USEPA to fulfill RACT. “Refinishing, Repairing, Preserving or Restoring Wood Products” coating operations were previously exempted, so all limits, although higher than the “New” coatings limits, capture previously unregulated coating categories. The limit for Low-Solids Stains, Toners and Washcoats in Table 2 was lowered from 700 g/L as originally proposed, to 480 g/L as suggested by USEPA comment.

Section (C)(4) has been modified to lower surface preparation solvent limits from 200 g/L to 25 g/L. Strippers have been separated out and remain at the original solvent limit.

Section (C)(5) capture and control system combined efficiency has been increased from 85 percent to 90 percent.

Work practices have been strengthened for cleanup of spray equipment.

D. PROPOSED RULE SUMMARY

This section gives a brief overview of the proposed amendments to Rule 1114.

Minor format changes have been made throughout which are for consistency and not substantive. These changes include, but are not limited to, capitalization of defined terms, relocation of commonly defined terms to Rule 102, updating cross references, and including the complete titles of referenced rule and test method titles.

Section (B) has been modified to update existing definitions, remove unused definitions, remove definitions that are contained in Rule 102, and add definitions for specialty coating categories.

Definitions removed because they are already included in Rule 102, or are being relocated to Rule 102: Adhesive; Aerosol Coating Product; Air Assisted Airless Spray; Air Pollution Control Officer (APCO); Capture Efficiency; Clear Topcoat; Coating; Compliance Assurance Monitoring; Control Device Efficiency; Dip Coat; Exempt Compounds; Flow Coat; Grams of VOC Per Liter of Coating Less

Water and Less Exempt Compounds (VOC Content); Grams of VOC Per Liter of Material; High Volume Low Pressure (HVLP); Ink; Multi-colored Coating; Overall Control Efficiency (C.E.); Repair Coating; Roll Coater; Stains; Stripper; Touch-up Coating; Transfer Efficiency; Volatile Organic Compound (VOC).

Definitions removed/no longer used: Conventional Air Spray; Theoretical Potential Emissions.

Definitions modified to provide clarity or consistency: Refinished Wood Products.

New definitions: Conversion Varnish; Crackle Lacquer; Faux Finishes; Imitation Wood Grain; Leaf Finishes; Low-Volume, Low-Pressure (LVLP); Medium Density Fiberboard (MDF) Coatings; New Wood Product; Tint; VOC Content.

Section (C) Table 1 has been separated to two tables representing “New Wood Products” coating limits and “Refinishing, Repairing, Preserving or Restoring” coating limits. Subsection (C)(1)(b) as originally proposed was removed pursuant to USEPA comment. The limit for Low-Solids Stains, Toners and Washcoats in subsection (C)(2)(a) Table 2 was lowered from 700 g/L as originally proposed, to 480 g/l as suggested by USEPA comment.

Subsection (C)(3) application methods have been expanded to include several additional methods, as well as stipulating that alternative application methods have been modified to meet transfer efficiency equal or better to that achieved by HVLP.

Subsection (C)(4) has been expanded to separate strippers from surface preparation and cleanup VOC limits. Additional cleaning methods have been added. Surface preparation and cleanup VOC limit has been lowered to 25 g/L, while strippers remain at 200 g/L.

Subsection (C)(5) has been modified to increase capture and control device efficiency from 85 percent to 90 percent and also includes a new requirement for an approved Operation and Maintenance Plan requirement for the emission control device.

Subsection (D)(1) cross reference corrected from (C)(2)(b) to (C)(1)(b). Subsection (D)(1)(b) has been reworded for clarity.

Subsections (D)(2), (5), (6) and (7) have been removed as the referenced sections have expired or are no longer applicable.

Subsection (D)(3) as originally proposed has been removed pursuant to USEPA comment. Other recently approved SIP-approved rules do not contain this exemption. A similar exemption in SCAQMD Rule 1136 was only applicable through July 1998.

New Subsections (D)(5), (6), (7) and (8) have been added for consistency with PCAPCD Rule content as SIP approved for RACT.

Subsection (F)(1)(a)(i) (F)(1)(c) have additional recordkeeping requirements to strengthen recordkeeping responsibility. Subsection (F)(1)(c) has been modified for clarity.

Subsection (F)(2)(b) has had “or” qualifier removed.

Section (G) has been modified to incorporate the full title of referenced test methods, and current version date as applies. Several calculations that were previously incorporated in the definition section have been relocated to this section, specifically: Control Device Efficiency; Grams of VOC Per Liter of Coating Less Water and Exempt Compounds; Grams of VOC Per Liter of Material; Overall Control Efficiency. Calculation of VOC Content has been added, including separate methods for calculating “Regulatory VOC Content” and “Actual VOC Content” to support different requirements found in Tables 1 and 2. A calculation for “VOC Composite Partial Vapor Pressure” has been added in support of the Stripper provision found in Section (C)(4)(b)(ii). Subsection (G)(3) has been modified by removing unnecessary redundant language.

E. FCAA 110(l) (42 U.S.C. §7410(l)) ANALYSIS

Rule 1114 was originally adopted 03/02/92, and subsequently amended 02/22/95 and 11/25/96. The SIP approved version of Rule 1114 is the 11/25/96 amendment, approved at 63 FR 44132, 08/18/98. This version of the rule is the only rule applicable in the MDAQMD, including the Blythe/Palo Verde area of Riverside County that was acquired from the SCAQMD. The 110(l) analysis will be based on the differences between the 11/25/96 MDAQMD amendment and the current proposed amendment.

Several definitions have been relocated to existing Rule 102. Many terms are defined in multiple district rules. In addition, many of these definitions are exact or near exact duplicates of each other. Pursuant to Governing Board direction regarding streamlining, the Air Pollution Control Officer (APCO) has determined that shifting common definitions to Rule 102 and updating them for consistency will improve clarity. Reference to Rule 102 has been added to Rule 1114. Several definitions specific to Rule 1114 have been added or updated for consistency other RACT rules. Changes in definitions are more current and specific; therefore not a relaxation.

VOC coating categories and limits remain as existing or have been derived from other district rules determined to fulfill RACT. Section (C)(1) and (C)(2) have been modified to include separate limits for “New” and “Refinishing, Repairing, Preserving or Restoring” coating limits. This approach was approved in two district rules that were recently determined by USEPA to fulfill RACT. “Refinishing, Repairing, Preserving or Restoring Wood Products” coating operations were previously exempted, so all limits, although higher than the “New” coatings limits, capture previously unregulated coating categories, thus increasing the rule stringency.

Additional application requirements have been added to (C)(3) for consistency with other district RACT rules. Application methods are all required to have transfer efficiency at

least equal to or better than HVLP as defined. As such, all application methods are at least as stringent to the existing requirements of the rule, therefore not a relaxation.

Section (C)(4) has been modified to lower surface preparation solvent limits from 200 g/L to 25 g/L. Strippers have been separated out and remain at the original solvent limit. A VOC limit for stripping was not specified in the previous amendment of Rule 1114. The District has proposed to retain a VOC limit for strippers of 200 grams or less of VOC per liter of material. This limit is not a relaxation, as strippers would previously have been assigned to the surface preparation and cleanup solvent category of 200 grams or less of VOC per liter of material. Strippers are separately defined with specific use restrictions. The provision for allowing a separate stripper limit is consistent with several rules deemed to meet RACT. Work practices in (C)(4) have been strengthened for cleanup of spray equipment. These practices expand and strengthen existing work practices.

Section (C)(5) capture and control system combined efficiency has been increased from 85 percent to 90 percent. This increase in efficiency strengthens the rule.

Exemption Section (D) has been strengthened by removing provisions no longer applicable, as well as removing exemptions for refinishing operations now covered by Section (C) Table 2.

Additional recordkeeping requirements have been added to provide more comprehensive information available for review.

Section (G) calculations have been incorporated. Several definitions were moved to Rule 102 and the accompanying calculation was correctly moved to this section for consistency with District rule format. Several other definitions were added in support of new provisions. These changes and updates do not relax the rule.

No part of the rule has been omitted, except those sections that have been superseded by date, or updated to current language. These minor changes and updates do not relax the rule.

F. SIP HISTORY

1. SIP History.

On July 1, 1993 the MDAQMD was formed pursuant to statute. Pursuant to statute it also retained all the rules and regulations of the San Bernardino County Air Pollution Control District (SBCAPCD) until such time as the Governing Board of the MDAQMD wished to adopt, amend or rescind such rules. The MDAQMD Governing Board, at its very first meeting, reaffirmed all the rules and regulations of the SBCAPCD. Rule 1114 was adopted 03/02/92 and subsequently amended 02/22/95 and 11/25/96. This 1996 version was also applicable to the Riverside County portion of the MDAQMD which was acquired from the SCAQMD on 07/01/94. The 11/25/96 version was determined to fulfill RACT

and was included in the State Implementation Plan (SIP) for the MDAQMD (63 FR 44132, 08/18/98).

2. SIP Analysis.

The District will request CARB to submit the proposed amendments to Rule 1114 to replace the 1996 SIP version. While not specifically mentioned in the Direct Final Rule for the 11/25/96 version of Rule 1114 (63 FR 44132, 08/18/98), the District assumes that the approval action was for both the San Bernardino County portion of the MDAB and the Blythe/Palo Verde Valley portion of Riverside County, and that SCAQMD Rule 1136 – *Wood Furniture and Cabinet Coatings* was thereby removed from the SIP for the Blythe/Palo Verde Valley portion of Riverside County.

This submission is necessary to satisfy 42 U.S.C. §§7511a (FCAA §182) which requires that ozone non-attainment areas implement RACT for sources that are subject to CTGs and for major sources of ozone precursors.

Former H&S Code §39614(d) (expired by its own terms on January 1, 2011) required the adoption of the most readily available, feasible and cost-effective local control measures for PM as contained on a list developed by the CARB. In addition, this document required the adoption of Reasonably Available Control Measures (RACM) for PM. The proposed amendments to Rule 1114 satisfy both of these requirements as detailed in §(V)(B).

Since there are previously existing SIP rules for this category the District will request that they be superseded. In order to replace existing SIP rules the District is required to show that the proposed amendments are not less stringent than the provisions currently in the SIP. Proposed Rule 1114 is more stringent than the previous SIP version because the amendments update transfer efficiency requirements, coating limits, control device efficiency, work practices, VOC content for strippers and surface preparation materials, and test methods. Therefore, the proposed amendments to Rule 1114 are more stringent than the 1996 version of the rule.

Appendix “A”

Rule 1114 – *Wood Products Coating Operations* Iterated Version

The iterated version is provided so that the changes to an existing rule may be easily found. The manner of differentiating text is as follows:

1. Underlined text identifies new or revised language.
2. ~~Lined out text~~ identifies language which is being deleted.
3. Normal text identifies the current language of the rule which will remain unchanged by the adoption of the proposed amendments.
4. *[Bracketed italicized text]* is explanatory material that is not part of the proposed language. It is removed once the proposed amendments are adopted.

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Rule 1114

Wood Products Coating Operations

(A) General

(1) Purpose

- (a) The purpose of this Rule is to limit the emission of Volatile Organic Compounds from Wood Products Coating Application Operations.

(2) Applicability

- (a) This Rule applies to Wood Products Coating Application Operations within the Mojave Desert Air Quality Management District.

(B) Definitions

The definitions contained in District Rule 102 – Definition of Terms shall apply unless the term is otherwise defined herein: [Definitions that are commonly used throughout the MDAQMD rule book have been relocated to existing Rule 102.]~~(1) For the purposes of this rule, the following definitions shall apply:~~

- ~~(a) — "Adhesive" — any substance that is capable of bonding surfaces together by attachment. [See Rule 102.]~~
- ~~(b) — "Aerosol Coating Product" — a pressurized Coating product that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application. [See Rule 102.]~~
- ~~(3) — "Air Assisted Airless Spray" — Equipment used to apply Coatings that use fluid pressure to atomize Coating and air pressure between 0.1 and 20 psig to adjust the spray pattern. [Derived from Placer County APCD (PCAPCD) Rule 236 §203.] [See Rule 102.]~~
- ~~(c) — "Air Pollution Control Officer" (APCO) — the person appointed to the position of Air Pollution Control Officer of the District pursuant to the provisions of California Health & Safety Code §40750, and his or her designee. [See Rule 102.]~~
- ~~(d1) "Binders" - Non-volatile polymeric Organic Materials (resins) which form the surface film in Coating applications.~~
- ~~(e) — "Capture Efficiency" — the ratio, expressed as a percentage, of the weight of the VOC in the effluent stream entering the control device to the weight of VOC~~

~~emitted from Wood Products Coating Application Operations, both measured simultaneously, and calculated by the following equation: [See definition in Rule 102. Calculation moved to §(G).]~~

$$\text{Capture Efficiency} = \frac{W_e}{W_e} \times 100$$

Where:

~~W_e = weight of VOC entering control device~~

~~W_e = weight of VOC emitted~~

(f2) “Clear Sealer” - ~~a~~A Coating containing Binders, but not opaque pigments, which seals the Wood Products prior to application of the subsequent Coatings.

~~(g) — “Clear Topcoat” — a Coating which contains resins and Binders but not opaque pigments and which is specifically formulated to form a transparent or translucent solid protective film. [See Rule 102.]~~

~~(h) — “Coating” — a material which is applied to a surface and which forms a film in order to beautify and/or protect such surface. [See Rule 102.]~~

((3i) “Coating Application Operations” ~~are a~~A combination of Coating application steps which may include use of spray guns, flash-off areas, spray booths, ovens, conveyors, and/or other ~~e~~Equipment operated for the purpose of applying Coating materials.

~~(j) — “Compliance Assurance Monitoring” — total equipment, mechanism(s), and/or technique(s) used to demonstrate and insure compliance with eControl dDevice eEfficiency requirements. Such monitoring is used to analyze and/or provide a permanent record of process parameters, such as temperatures, pressures and flow rates. [See Rule 102.]~~

((4k) “Composite Wood” - ~~a~~A manufactured material consisting of tightly compressed wood fibers bonded with resins which includes, but is not limited to, particleboard, fiberboard and hardboard.

~~(l) — “Control Device Efficiency” — the ratio, expressed as a percentage, of the weight of the VOC removed by the control device from the effluent stream entering the control device to the weight of VOC in the effluent stream entering the control device, both measured simultaneously, and calculated by the following equation: [See definition in Rule 102. Calculation moved to §(G).]~~

$$\text{Control Device Efficiency} = \frac{(W_e - W_{te})}{W_e} \times 100$$

Where:

~~We = weight of VOC entering control device~~

~~Wa = weight of VOC discharged from control device~~

- ~~(m) — “Conventional Air Spray” — a spray eCoating method in which the Coating is atomized by mixing it with compressed air at an air pressure greater than 10 pounds per square inch (gauge) at the point of atomization. Airless and aAir aAssisted aAirless sSpray technologies are not Conventional Air Spray because the Coating is not atomized by mixing it with compressed air. [Definition no longer used. §(D)(7)(a) deleted.]~~
- (5) “Conversion Varnish” – A topcoat or sealer which is comprised of an alkyd or other resin, blended with amino resin, in a homogeneous liquid that, when acid catalyzed and applied, hardens by evaporation and polymerization. [Derived from San Diego County APCD (SDCAPCD) Rule 67.11 §(c)(8).]
- (6) “Crackle Lacquer” – A clear or pPigmented tTopcoat intended to produce a cracked or crazed appearance when dry. [Derived from Placer County APCD (PCAPCD) Rule 236 §212.]
- (n7) “Custom Replica Furniture” - newNew, made-to-order furniture that looks like antique furniture, rather than new furniture. It features detailed wood carvings and bruising of the wood to simulate antique furniture.
- ~~(o) — “Dip Coat” — to dip an object into a vat of Coating material and drain off any excess Coating. [See Dip Coater definition Rule 102]~~
- ~~(p) — “Exempt Compounds” — those compounds listed in 40 CFR 51.100(S)(1). [See Rule 102.]~~
- (8) “Faux Finishes” – A finish intended to simulate a surface other than wood, including sand, slate, marble, metal, metal flake, or leather. [Derived from PCAPCD Rule 236 §220.]
- (q9) “Filler” - aA material which is applied to a Wood Product, and whose primary function is to build up, or fill the voids and imperfections in the Wood Product to be coated.
- ~~(r) — “Flow Coat” — to coat an object by flowing a stream of Coating over an object and draining off any excess Coating. [See Flow Coater definition Rule 102]~~
- (s) “Grams of VOC Per Liter of Coating Less Water and Less Exempt Compounds” (VOC Content) — the weight of VOC per combined volume of VOC and Coating solids, calculated by the following equation: [See definition in Rule 102. Calculation moved to §(G).]

$$\frac{\text{Grams VOC}_{(\text{less water and exempt compounds})}}{\text{Liter of Coating}} = \left[\frac{(W_s - W_w - W_{es})}{(V_m - V_w - V_{es})} \right]$$

Where:

W_s	=	weight of volatile compounds in grams
W_w	=	weight of water in grams
W_{es}	=	weight of exempt compounds in grams
V_m	=	volume of material in liters
V_w	=	volume of water in liters
V_{es}	=	volume of exempt compounds in liters

- (t) "Grams of VOC Per Liter of Material" -- the weight of VOC per volume of material, calculated by the following equation: [See definition in Rule 102. Calculation moved to §(G).]

$$\text{Grams of VOC per Liter of Material} = \left[\frac{(W_s - W_w - W_{es})}{V_m} \right]$$

Where:

W_s = weight of volatile compounds in grams

W_w = weight of water in grams

W_{es} = weight of exempt compounds in grams

V_m = volume of material in liters

- (u10) "High-Solids Stains" - Stains containing more than one (1) pound of solids per gallon by weight.

- (v) "High-Volume Low-Pressure (HVLP) Spray" -- to spray a coating by means of a gun that operates between 0.1 and 10.0 psig air pressure, not to exceed 10 psig, measured at the air cap of the Coating application system, and a permanent liquid Coating pressure of not more than 50 psig. [See Rule 102.]

- (11) “Imitation Wood Grain” – A hand applied finish that simulates the appearance of a specific natural wood grain. [Derived from PCAPCD Rule 236 §225.]
- ~~(w)~~ “Ink” – a fluid that contains dyes and/or colorants and is used to make markings but not to protect surfaces [See Rule 102.]
- ~~(12)~~ “Leaf Finishes” - A finish used in conjunction with metal leaf or foil. [Derived from PCAPCD Rule 236 §227.]
- (13) “Low-Volume, Low-Pressure” (LVLP) – Spray eCoating application Equipment with air pressure between 0.1 and 10.0 psig and air volume less than 15.5 cfm per spray gun and which operates at a maximum fluid delivery pressure of 50 psig. [Derived from PCAPCD Rule 236 §229.]
- (~~14~~) “Low-Solids Stains, Toners and Washcoats” - Stains, Toners and Washcoats containing one (1) pound of solids per gallon, or less, by weight.
- (15) “Medium Density Fiberboard (MDF) Coatings” – The initial eCoating which is applied directly to the surface of MDF. MDF is a wood product composed of tightly compressed wood fibers bonded with resins, and has a density greater than 45 pounds per cubic foot. [Derived from SDCAPCD Rule 67.11 §(c)(20).]
- (~~y~~16) “Mold-Seal Coating” - ~~t~~The initial Coating applied to a new mold or repaired mold to provide a smooth surface which, when coated with a mold release eCoating, prevents products from sticking to the mold.
- (17) “New Wood Product” – A Wood Product which has not been previously coated. A Wood Product from which Coatings have been removed to repair flaws in initial Coating applications is a New Wood Product. [Derived from SDAPCD Rule 67.11 §(c)(20) and added in response to USEPA verbal comment 12/21/17.]
- ~~(z)~~ “Multi-Colored Coating” – a Coating which exhibits more than one color when applied, and which is packaged in a single container and applied in a single coat. [See Rule 102.]
- (aa) “Overall Control Efficiency” (C.E.) – the ratio, expressed as a percentage, of the weight of the VOC removed by the emission control system to the total weight of VOC emitted from Coating Application Operations, both measured simultaneously, calculated by the following equations: [See definition in Rule 102. Calculation moved to §(G).]

$$C.E. = \frac{(W_e - W_u)}{W_e} \times 100$$

$$C.E. = \frac{(\text{Capture Efficiency}) \times (\text{Control Device Efficiency})}{100}$$

Where:

W_e = weight of VOC entering control device

W_a = weight of VOC discharged from the control device

W_e = weight of VOC emitted

(bb18) "Panel" - a flat piece of wood or Wood Products, usually rectangular, and used inside homes and mobile homes for wall decorations.

(ee19) "Pigmented Primers, Sealers and Undercoats" - Opaque Coatings which contain Binders and colored pigments which are formulated to hide the wood surface, that are applied prior to the topcoat to provide a firm bond, level the wood product surface, or seal the wood product surface.

(dd20) "Pigmented Topcoat" - a final opaque Coating which contains Binders and colored pigments, and is specifically formulated to hide the wood surface and form a solid protective film.

(ee21) "Rate Per Day" - the amount applied between 12:00 a.m. and 11:59 p.m. on the same calendar day.

~~(ff) "Reactive Diluent" - a liquid which is a VOC during application and one which, through chemical or physical reactions such as polymerization, becomes an integral part of a finished Coating. For Coatings that contain Reactive Diluents, the VOC Content of the Coating is determined after curing. The VOC Content shall be calculated by the following equation: [Definition not used.]~~

$$\text{VOC Content}_{\text{Coatings that contain Reactive Diluents}} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Where:

W_s = weight of volatile compounds not consumed during curing in grams

W_w = weight of water not consumed during curing in grams

W_{es} = weight of exempt compounds not consumed during curing in grams

V_m = volume of the material prior to reaction in liters

V_w = volume of water not consumed during curing in liters

V_{es} = ~~volume of exempt compounds not consumed during curing~~
~~in liters~~

- ~~(gg22)~~ "Refinished Wood Product" - ~~the recoating of~~ A post-consumer Wood Products which has had some or all of the eCoatings removed, and to which new eCoatings are applied in order to preserve or restore the post-consumer wood product to its original condition. A wood product from which eCoatings have been removed to repair flaws in initial eCoatings applications is not a ~~rRefinished wWood~~ pProduct that have been previously coated. *[Derived from SDAPCD Rule 67.11 §(c)(24). Modified to clarify and specify the limits provided in "Limits for VOC Content of Coatings for Refinished Wood Products."]*
- ~~(hh)~~ "Repair Coating" - a Coating used to re-coat portions of a product which has sustained mechanical damage to the Coating following normal painting operations. *[See Rule 102.]*
- ~~(ii)~~ "Roll Coater" - a series of mechanical rollers that forms a thin Coating film on the surface of roller, which is applied to a substrate by moving the substrate underneath the roller. *[See Rule 102.]*
- ~~(jj23)~~ "Shutter" - ~~an~~ An exterior screen or cover for a window, usually hinged and often fitted with louvers. This includes non-functional Shutters.
- ~~(kk24)~~ "Simulated Wood Materials" - ~~m~~ Materials, such as plastic, glass, metal, that are made to give a wood-like appearance or are processed like Wood Products.
- ~~(H25)~~ "Stencil Coating" - ~~an~~ An ~~i~~ nk or a pigmented Coating which is rolled or brushed onto a template or stamp in order to add identifying letters and/or numbers to Wood Products.
- ~~(mm)~~ "Stains" - ~~Coatings which are formulated to change the color of a surface but not completely conceal the surface, so that the grain is still visible.~~ *[See Rule 102.]*
- ~~(nn)~~ "Stripper" - ~~a liquid used to remove cured Coatings, cured Inks and/or cured Adhesives.~~ *[See Rule 102.]*
- ~~(oo)~~ "Theoretical Potential Emissions" - ~~the maximum capacity of a facility to emit any air pollutant under its physical and operational design, based on 8,760 hours of operation per year and before the use of air pollution abatement equipment.~~ *[Definition no longer used.]*
- ~~(26)~~ "Tint" - ~~A colorant added in small quantities to a Stain to achieve a particular color for the finished product.~~ *[Derived from PCPCD Rule 236 §247.]*
- ~~(pp276)~~ "Toner" - ~~a~~ A Wash Coat which contains Binders and dyes or pigments to add ~~t~~ Tint to a coated surface.

- (qq) ~~"Touch-up Coating"~~—a Coating used to cover minor Coating imperfections appearing after the main Coating operation. [See Rule 102.]
- ~~(rr)~~ ~~"Transfer Efficiency"~~—the ratio of the weight of Coating solids deposited on an object to the total weight of Coating solids used in a Coating application step, expressed as a percentage. [See Rule 102.]
- (ss) ~~"Volatile Organic Compound (VOC)"~~—any volatile compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and Exempt Compounds. [See Rule 102.]
- (288) VOC Content – The weight of VOC per volume of Coating. VOC Content is VOC Regulatory, as defined in subsection (G)(4)(a)(i), for all ~~e~~Coatings except those in the Low Solids category. For ~~e~~Coating in the Low Solids category, the VOC Content is VOC Actual, as defined in subsection (G)(4)(a)(ii). If the ~~e~~Coating is a multi-component product, the VOC Content is VOC Content as mixed or catalyzed. If the ~~e~~Coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing. [Derived from MDAQMD Rule 1113. Both methods of calculation are necessary for rule implementation.]
- (~~tt~~299) "Wash Coat" - ~~a~~A Coating that contains no more than 1.0 pounds of solids per gallon, by weight, which is used to seal wood surfaces, prevent undesired staining, and control penetration.
- (~~uu~~3050) "Wood Products" - ~~those~~ Those surface coated room furnishings which include cabinets (kitchen, bath, and vanity), tables, chairs, beds, sofas, ~~s~~Shutters, art objects, and any other coated object made of solid wood and/or Composite Wood and/or made of Simulated Wood Material used in combination with solid wood or Composite Wood.

(C) Requirements

- (1) Limits for VOC Content of Coatings & Adhesives for New Wood Products
- (a) Except as provided in subsections (C)(4), or (C)(5), no Person shall apply any Coatings to a new wood product if such materials have a VOC Content exceeding the applicable limits specified in Table 1. The VOC Content of Coatings, except Low-Solids Stains, Toners, Washcoats and Solvents shall be determined in accordance with subsection (G)(4)(a)(i) and (G)(2)(a). The VOC Content of Low-Solids Stains, Toners, Washcoats and Solvents shall be determined in accordance with subsection (G)(4)(a)(ii) and (G)(2)(a). VOC limits expressed in grams VOC per liter of eCoating shall be used.

Table 1
VOC Content of Coatings and Adhesives for New Wood Products

<u>Coating</u>	<u>Current Limit</u>	<u>On and After</u> <u>MM/DD/YYYY</u> <u>(1 year after date of</u> <u>adoption)</u>	
	<u>g/l (lb/gal) Less</u> <u>Water and Less</u> <u>Exempt Compounds</u>	<u>g/L (lb/gal) Less Water</u> <u>and Less Exempt</u> <u>Compounds</u>	
<u>General [New category]</u>	<u>N/A</u>	<u>275 (2.3)</u>	
<u>Clear Sealers [No change]</u>	<u>275 (2.3)</u>	<u>275 (2.3)</u>	
<u>Clear Topcoats [No change]</u>	<u>275 (2.3)</u>	<u>275 (2.3)</u>	
<u>Pigmented Primers, Sealers and Undercoats</u> <u>[No change]</u>	<u>275 (2.3)</u>	<u>275 (2.3)</u>	
<u>Pigmented Topcoats [No change]</u>	<u>275 (2.3)</u>	<u>275 (2.3)</u>	
<u>Fillers [No change]</u>	<u>275 (2.3)</u>	<u>275 (2.3)</u>	
<u>High-Solids Stains [No change]</u>	<u>350 (2.9)</u>	<u>350 (2.9)</u>	
<u>Inks [No change]</u>	<u>500 (4.2)</u>	<u>500 (4.2)</u>	
<u>Mold-Seal [No change]</u>	<u>750 (6.3)</u>	<u>750 (6.3)</u>	
<u>Multi-Colored Coatings [No change]</u>	<u>275 (2.3)</u>	<u>275 (2.3)</u>	
<u>Low-Solids Stains, Toners and Washcoats</u> <u>[Changed to Actual VOC calculation]</u>	<u>120 (1.0)</u>	<u>120 (1.0)</u>	
<u>Adhesives [No change]</u>	<u>250 (2.1)</u>	<u>250 (2.1)</u>	
<u>Conversion Varnish [New Category]</u>	<u>N/A</u>	<u>550 (4.6)</u>	

(b) — Notwithstanding the VOC limits specified in this section, a Person may apply a sealer with a VOC Content not exceeding 680 grams per liter, provided that the Topcoat used on the same wood product does not exceed 275 grams per liter. [Derived from Placer County APCD Rule 236 §302.1.]—[Provision removed at the request of USEPA to retain rule stringency.]

(2) Limits for VOC Content of Coatings & Adhesives for Refinishing, Repairing, Preserving or Restoring Wood Products

[This type of operation was previously exempted, so all limits, although higher than for eCoating of new wWood pProducts, capture previously unregulated category limits and are thereby not a relaxation of the rule. Language and VOC limits derived from Placer County APCD Rule 236 and San Diego County APCD Rule 67.11.]

(a) Except as provided in subsections (C)(4); or (C)(5), no Person shall apply any Coatings to refinish, repair, preserve or restore a wood product if such materials have a VOC Content exceeding the applicable limits specified in Table 2. The VOC Content of Coatings, except Low-Solids Stains,

Toners, Washcoats and Solvents shall be determined in accordance with subsection (G)(4)(a)(i) and (G)(2)(a). The VOC Content of Low-Solids Stains, Toners, Washcoats and Solvents shall be determined in accordance with subsection (G)(4)(a)(ii) and (G)(2)(a). VOC limits expressed in grams VOC per liter of eCoating shall be used.

Table 2
VOC Content of Coatings and Adhesives for Refinishing,
Repairing, Preserving or Restoring Wood Products

<u>Coating</u>	<u>g/l (lb/gal) Less Water and Less Exempt Compounds</u>
<u>General</u>	<u>420 (3.5)</u>
<u>Clear Topcoats</u>	<u>680 (5.7)</u>
<u>Conversion Varnishes</u>	<u>550 (4.6)</u>
<u>Fillers</u>	<u>500 (4.2)</u>
<u>High-Solids Stains</u>	<u>700 (5.8)</u>
<u>Inks</u>	<u>500 (4.2)</u>
<u>Medium Density Fiberboard (MDF) Coatings</u>	<u>680 (5.7)</u>
<u>Mold-Seal Coating</u>	<u>750 (6.3)</u>
<u>Multi-Colored Coatings</u>	<u>680 (5.7)</u>
<u>Pigmented Coatings</u>	<u>600 (5.0)</u>
<u>Sealers</u>	<u>680 (5.7)</u>
<u>Low-Solids Stains, Toners and Washcoats</u> <u>[Limit adjusted pursuant to USEPA</u> <u>comment of 12/22/17.]</u>	<u>480 700 (5.84.0)</u>
<u>Any other Low Solids Coatings</u>	<u>480 (4.0)</u>

~~Any owners and/or operators of Wood Products Coating Application Operations shall not apply any Coating or Adhesive to a Wood Product which has a VOC Content, including any VOC-containing material added to the original Coating supplied by the manufacturer, which exceeds the applicable limit specified below, unless emissions to the atmosphere are controlled by air pollution abatement equipment with an Overall Control Efficiency of at least 85 percent. Any Coating subject to this rule that meets either of the two VOC Content limit formats (grams per liter or lb/gal) is in compliance with this subsection. [Emission Control System Requirements moved to (C)(5).]~~

(i) LIMITS

Grams of VOC Per Liter of Coating,

Less Water and Less Exempt Compounds (VOC Content)

		On and After 7/1/97	On and After 7/1/2005

		On and After 7/1/97		On and After 7/1/2005
Coating	Current Limit g/L (lb/gal)	Column I or g/L (lb/gal)	Column II g/L (lb/gal)	g/L (lb/gal)
Clear Sealers	680 (5.7)	550 (4.6)	680 (5.7)	275 (2.3)
Clear Topcoat	680 (5.7)	550 (4.6)	275 (2.3)	275 (2.3)
Pigmented Primers, Sealers and Underecoats	600 (5.0)	550 (4.6)	600 (5.0)	275 (2.3)
Pigmented Topcoats	600 (5.0)	550 (4.6)	275 (2.3)	275 (2.3)

Effective July 1, 1997, a person or facility shall use Coatings on Wood Products that comply with either all VOC Content limits in Column I or all VOC Content limits in Column II. A person or facility that applies a Pigmented Primer, Sealer or Underecoat, but not a Clear Topcoat or Pigmented Topcoat, to a Wood Product shall be subject to column I for that product.

- (ii) Notwithstanding the requirements of subsection (C)(1)(a)(i), a person or facility that applies a topcoat and a primer, sealer or underecoat to a Shutter may, until July 1, 2005, choose to comply with the VOC Content limits specified below for that Shutter:
[This section has expired by its terms.]

LIMITS
Grams of VOC Per Liter of Coating,
Less Water and Less Exempt Compounds (VOC Content)

Coating	g/L (lb/gal)
Clear Sealers	275 (2.3)
Clear Topcoat	680 (5.7)
Pigmented Primers, Sealers & Underecoats	275 (2.3)
Pigmented Topcoats	600 (5.0)

- (iii) **LIMITS**
Grams of VOC Per Liter of Coating,
Less Water and Less Exempt Compounds (VOC Content)

		On and After 7/1/97	On and After 7/1/2005
Coating	Current Limit g/L (lb/gal)	g/L (lb/gal)	g/L (lb/gal)
Fillers	500 (4.2)	500 (4.2)	275 (2.3)

		On and After 7/1/97	On and After 7/1/2005
High Solid Stains	700 (5.8)	550 (4.6)	350 (2.9)
Inks	500 (4.2)	500 (4.2)	500 (4.2)
Mold Seal Coatings	750 (6.3)	750 (6.3)	750 (6.3)
Multi-Colored Coatings	685 (5.7)	685 (5.7)	275 (2.3)
Low Solids Stains, Toners and Washcoats	800 (6.7)	480 (4.0)	120 (1.0)
Adhesives	250 (2.1)	250 (2.1)	250 (2.1)

(32) Transfer Efficiency [Updated to incorporate application methods deemed to meet current federal RACT contained in PCAPCD Rule 236 and SDCAPCD Rule 67.11.]

(a) A Person or Facility shall not apply Coatings to Wood Products subject to the provisions of this rule unless the Coating is applied with properly operating equipment, according to manufacturer's suggested guidelines, and by the use of one of the following methods:

- (i) Flow Coat;~~; or~~
- (ii) Dip Coat;~~; or~~
- (iii) High-Volume Low-Pressure (HVLP) spray;~~; or~~
- (iv) Low-Volume Low-Pressure spray Equipment; or
- ~~(iv)~~ Paint brush;~~; or~~
- ~~(v)~~ Hand roller;~~; or~~
- ~~(vi)~~ Roll Coater;~~; or~~
- (viii) Air-~~a~~ssisted ~~a~~Airless Spray(for Touch-Up and Repair Coating only);
- (ix) Electrostatic Application Equipment; or [Defined in Rule 102.]
- ~~(xvii)~~ Such other Coating application methods as are demonstrated to the Air Pollution Control Officer to ~~be capable of achieving at least 65 percent have a~~ Transfer Efficiency equal to or better than achieved by HVLP spraying and for which written approval of the Air Pollution Control Officer has been obtained. [Modification proposed, consistent with current language in recently amended Rule 1115.]

(34) Strippers, Surface Preparation, Clean-up Solvent and Equipment Cleaning

(a) The requirements of this Section shall apply to any Person using solvent for surface preparation and cleanup.

- (i) A Person shall not use an organic compound for surface preparation, except Strippers, with a VOC Content in excess of

25200 gGrams of VOC pPer lLiter of mMaterial (0.214.67 pounds per gallon). [Solvent limit lowered to meet federal RACT limit as contained in PCAPCD Rule 236 and SDCAPCD Rule 67.11.]

(ii) A person shall not use a Stripper on Wood Products unless it contains less than 350 grams of VOC per liter of material. [Relocated to (C)(4)(b) below.]

(iii) A Pperson shall use closed, non-leaking, and non-absorbent containers for the storage or disposal of cloth or paper used for sSolvent surface preparation and cleanup.

(iiiiv) A Pperson shall store fresh or spent sSolvent in closed containers.

(iv) A Pperson shall not use organic compounds for the cleanup of spray eEquipment, including paint lines, unless eEquipment for collecting the cleaning compounds and minimizing their evaporation to the Atmosphere is used.

(v) Spray gun nozzles only, may be soaked in Solvent-based materials for cleaning, provided the container is not more than five (5) gallons in size, and is kept tightly covered at all times except when accessing the container. [Derived from PCAPCD Rule 236 §306.1.]

(vi) A Person shall not use Solvent based VOC-containing materials for the clean-up of spray Equipment used in wWood pProducts eCoating aApplication eOperations, unless the spray Equipment is disassembled and cleaned in an enclosed gun cleaner. [Derived from PCAPCD Rule 236 §306.4.]

(b) A Person shall not use a Stripper on wood products unless: [Derived from San Diego County APCD Rule 67.11.]

(i) The sStripper contains less than 200 gGrams of VOC pPer lLiter of mMaterial; or

(ii) The VOC composite partial vapor pressure for the sStripper is 2 mm Hg (0.04 psia) or less at 68 F (20 C), as calculated pursuant to subsection (G)(5).

(5) Add-On Control System

(a) In lieu of complying with the VOC content limitations in subsection (C)(1), (C)(2), and/or (C)(4) above, air pollution control Equipment with a capture and control system combined efficiency of at least 90 percent, as determined pursuant to subsections (G)(2)(b) and (G)(2)(c) of this Rule, may be used. [Control device requirement moved from previous subsection (C)(1)(a).]

(b) A Person using control Equipment pursuant to (C)(5)(a) shall submit to the APCO for approval an Operation and Maintenance Plan for the proposed emission control device and emission collection system and

receive approval prior to operation of the control Equipment. Such Plan shall: [Operation and Maintenance Plan derived from SDAPCD Rule 67.11 and PCAPCD Rule 236.]

- (i) Identify all key system operating parameters. Key system operating parameters are those necessary to ensure compliance with subsection (C)(5)(a), such as temperature, pressure, and/or flow rate; and
- (ii) Include proposed inspection schedules, anticipated ongoing maintenance, and proposed recordkeeping practices regarding key operating system parameters.

(46) Prohibition of Specifications

- (a) Any ~~P~~erson shall not specify the use in the District of any Coating to be applied to any Wood Products subject to the provisions of this rule that does not meet the limits and requirements of this rule. The requirements of this paragraph shall apply to all written or oral contracts.

(57) Compliance Statement Requirement

- (a) The manufacturer of Coatings subject to this rule shall include a statement of VOC Content as supplied on data sheets; including Coating components, expressed in grams per liter or pounds per gallon, excluding water and exempt ~~s~~Solvents.

(D) Exemptions

- (1) The provisions of subsections (C)(1)(a), ~~(C)(2)(b), and (C)(2)(a), (C)(3)(a) and (C)(4)~~ of this rule shall not apply to: [Typographical cross reference error corrected pursuant to USEPA verbal comment 12/21/17.]

- (a) The use of Aerosol Coating Products.

- (b) ~~Facilities whose Rate Per Day of Coating use is less than one gallon, including any VOC-containing materials added to the original Coating as supplied by the manufacturer. Only Coatings subject to this rule shall be included in the calculation of Rate Per Day, or; Coating Application Operations that emit not more than 3 pounds of VOCs per day and not more than 200 pounds of VOCs per calendar year.~~

Facilities whose Rate Per Day of Coating use is less than one (1) gallon including any VOC-containing materials added to the original Coating as supplied by the manufacturer (only Coatings subject to this rule shall be included in this calculation), and whose Wood Coating Application Operations do not emit more than 3 pounds of VOCs per day and not more

than 200 pounds of VOCs per calendar year. [Subsection reworded for clarity after discussion with USEPA 12/21/17.]

- (c) Laminating of fiberglass, metal, or plastic sheets to wood Panels.
- (d) The application of Coatings to musical instruments.
- (e) The application of Coatings to billiard tables.

~~_(2) The July 1, 1997 limits which are set forth in subsection (C)(1)(a) shall not apply to: [Expired by its terms.]~~

~~(a) Wood Products Coating Application Operations which emit not more than 3 pounds of VOC per hour, before the use of air pollution abatement equipment; or~~

~~(b) Wood Products Coating Application Operations which emit not more than 15 pounds of VOC per day, before the use of air pollution abatement equipment; or~~

~~(c) Facilities that do not exceed 10 tons per year Theoretical Potential Emissions.~~

~~_(3) The provisions of subsection (C)(1)(a) shall not apply to any Refinishing operations necessary for preservation, to return the Wood Product to original condition, to replace missing furniture to produce a matching set, or to produce Custom Replica Furniture. [This exemption removed for stringency purposes pursuant to USEPA comment 12/22/17. Other recently approved SIP-approved rules do not contain this exemption. A similar exemption in SCAQMD Rule 1136 was only applicable through July 1998 so removal will maintain consistency between the adjacent Districts.]~~

~~(44) The provisions of subsection (C)(1)(a), (C)(1)(b), and (C)(2)(a) shall not apply to Touch-up and Repair Coatings or Stencil Coatings.~~

~~(5) For the purposes of claiming an exemption pursuant to subsections (D)(2)(a) or (D)(2)(b), hourly or daily emissions shall be considered from January 1, 1996 forward. [The referenced sections are expired and proposed for removal from this draft, and no longer applicable.]~~

~~(6) Once a facility exceeds 3 pounds of VOC per hour, or 15 pounds of VOC per day, respectively, it will remain subject to the July 1, 1997 limits even if its emissions later fall below the applicability threshold. [The referenced limits are no longer applicable and proposed for removal from this draft.]~~

~~_(7) Notwithstanding the provisions of subsection (C)(2)(a), a person or facility may use:~~

- ~~(a) Any spray equipment that uses only Coatings that comply with the July 1, 2005 VOC Content limits; or~~
- ~~(b) Any spray equipment, except Conventional Air Spray, that uses only Coatings that contain 550 g/L, or less, of VOC Content.~~
- (85) Any Facility classified as exempt or claiming to be exempt under this Section (D), shall meet the record keeping requirements of this rule so as to be able to certify the exemption status.
- ~~(6) Residential non-commercial operations are exempt from the provisions of this rule. [Derived from PC APCD Rule 236 §104.1.]~~
- ~~(7) Facilities which use of less than 55 gallons per year of wWood pProducts Coatings and/or sStrippers (singly or in any combination) are exempt from the provisions of this rule with the exception of Section (F). [Derived from PCAPCD Rule 236 §104.6.]~~
- ~~(8) Coatings used to provide the following finishes are exempt from the provision of subsection (C)(1)(a), (C)(1)(b); and (C)(2)(a), provided that the records are maintained as specified in Section (F): [Derived from PCAPCD Rule 236 §104.7.]~~
 - ~~(a) Crackle Lacquers;~~
 - ~~(b) Faux Finishes;~~
 - ~~(c) Imitation Wood Grain;~~
 - ~~(d) Leaf Finishes.~~
- ~~(9) Tints applied to sStains in quantities not to exceed one (1) pint of Tint in any operating day are exempt from all the provisions of this rule, provided that the records are maintained as specified in Section (F): [Derived from PCAPCD Rule 236 §104.8.]~~

(E) Administrative Requirements

- (1) Rule 442 Applicability
 - (a) Any Ccoating, Ccoating Ooperation, or Ffacility which is exempt from all or a portion of the VOC Content limits of this rule shall comply with the provisions of Rule 442 unless compliance with the limits specified in this rule are achieved.

(F) Monitoring and Records

(1) Coating Records

- (a) Any ~~P~~person subject to ~~Sections (C)(1)(a), (C)(3)(a), (D)(1)(b) or (D)(2)~~this rule shall comply with the following requirements:
- (i) The ~~P~~person shall maintain and have available during an inspection, a current list of Coatings in use which provides all of the Coating data necessary to evaluate compliance, including the following information, as applicable:
 - 1. Coating, catalyst, and reducer used.
 - 2. ~~M~~mix ratio of components used.
 - 3. VOC Content of Coating as applied.
 - 4. A data sheet, material list, or invoice giving material name, manufacturer, identification, material application and VOC content.
 - (ii) The ~~P~~person shall maintain records on a daily basis including:
 - 1. Coating and mix ratio of components used in the Coating; and
 - 2. ~~Q~~quantity of each Coating applied.
 - (iii) The ~~P~~person shall maintain records on a daily basis showing the type and amount of ~~s~~Solvent used for cleanup, surface preparation, and paint removal.
- (b) Notwithstanding the provisions of subsection (F)(1)(a), a ~~P~~person or ~~F~~facility which exclusively uses Coatings formulations compliant with subsection (C)(1)(a), ~~(C)(1)(b), and (C)(2)(a)~~ may maintain usage records on a monthly basis.
- (c) Persons using Stains and/or Tints and subject to this Rule shall maintain records on a monthly basis that provide the following information:
- (i) Name, description, container size and actual VOC Content of any ~~t~~Tints used to color ~~s~~Stains.
 - (ii) ~~Usage of any Tint is limited to one (1) pint in any operating day. Records of any ~~t~~Tint use shall be maintained on a daily basis. [Please refer to §(D)(8) for one (1) pint limit.]~~

(2) Compliance Assurance Monitoring

- (a) Each Coating Application Operation subject to subparagraph (C)(1)(a), ~~(C)(1)(b) or (C)(2)(b)~~ which is using air pollution abatement ~~e~~Equipment to meet the control requirement shall:
- (i) Uutilize Compliance Assurance Monitoring, as approved by the APCO. Each monitoring device(s), mechanism and/or technique

shall be calibrated/maintained in a manner approved by the APCO;
and

- (ii) ~~M~~maintain and produce daily records of key system operating parameters and maintenance procedures which will demonstrate continuous operation and compliance of the air pollution abatement ~~e~~Equipment during periods of emissions-producing activities. Key system operating parameters are those necessary to ensure compliance with VOC content of ~~e~~Coating requirements, such as temperatures, pressures and flow rates.
- (b) Compliance with subsection (C)(~~15~~)(~~a~~), shall be determined by compliance testing as prescribed in subsections (G)(2)(b) and (c) and ~~for~~ by evaluating Compliance Assurance Monitoring data. *[“Or” qualifier removed pursuant to discussion with USEPA, 12/21/17.]*
- (3) All records for the previous five (~~5~~) year period maintained and produced pursuant to this Section shall be retained and available for inspection by the APCO upon request.

(G) Test Methods

- (1) A violation of the limits contained in this Rule, as determined by any one of these test methods, shall constitute a violation of this Rule.
- (2) The following specified test methods shall be used to determine compliance with the provisions of this Rule. *[Full title of methods included pursuant to EPAs Little Blue Book, and updated to reference current date of versions as needed.]*
 - (a) Determination of VOC Content and solids content: Samples of Coatings and ~~s~~Solvent as specified in Section (C)(~~1~~)(~~a~~) shall be analyzed as prescribed by EPA Reference Method 24 – *Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings* for VOC Content and solids content (without correction for Exempt Compounds) and ASTM D4457-85, *91 - Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph*, or ARB Method 432 – *Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings (09/12/1989)* for determination of emissions of Exempt Compounds. Perfluorocarbon compounds shall be assumed to be absent from a product or process unless a manufacturer or ~~F~~facility ~~O~~operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present in the product or process and provides a test method acceptable to EPA and ARB which can be used to quantify the specific compounds.

- (b) Determination of Emissions: For any ~~O~~wners and/or ~~O~~perators who choose to comply with the provisions of Section (C)(1)(a-), (C)(1)(b) or (C)(2)(a) through the use of air pollution abatement ~~e~~Equipment, emissions of VOCs shall be measured as prescribed by EPA Reference Method 25 – Gaseous Nonmethane Organic Emissions for determination of VOC emissions (without correction for ~~e~~Exempt ~~e~~Compounds) and EPA Method 18 – Volatile Organic Compounds by Gas Chromatography, or ARB Method 422 – Determination of Volatile Organic Compounds in Emissions from Stationary Sources (Exempt VOCs) (02/16/2017) for measuring emission of ~~e~~Exempt ~~e~~Compounds.
- (c) Determination of Overall Control Efficiency: The Overall Control Efficiency of air pollution abatement ~~e~~Equipment shall be determined by a minimum of three sampling runs conducted according to USEPA’s technical guidance document “Guidelines for Determining Capture Efficiency”, January 9, 1995.
- (3) ~~The following test method is recommended for use in determining Transfer Efficiency of alternative application methods:~~ Demonstration of Transfer Efficiency of alternative application methods subject to subsection (C)(23)(a) shall be conducted in accordance with South Coast Air Quality Management District’s “Spray Equipment Transfer Efficiency Test Procedure for Equipment User” (May 24, 1989). [Superfluous language removed for clarity pursuant to discussion with USEPA, 12/21/17.]

(4) Calculation of VOC Content:

(a) For the purpose of determining compliance with the VOC Content limits in Section (C), the VOC Content of a Coating shall be determined by using the procedures in subsection (i) or (ii) below, as appropriate. If the manufacturer does not recommend thinning, the VOC Content must be calculated for the product as supplied. The VOC Content of a Tint Base shall be determined without Colorant that is added after the Tint Base is manufactured. Effective (1 year after date of adoption), if the Coating is a multi-component product, the VOC Content must be calculated as mixed or catalyzed. Effective (1 year after date of adoption), if the Coating contains Silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC Content must include the VOCs emitted during curing. [Derived from MDAQMD Rule 1113 for language and format, consistent with PCAPCD Rule 236]

(i) Regulatory VOC Content – The weight of VOC per combined volume of VOC and ~~e~~Coating solids, shall be calculated by the following equation:

$$VOC_{Regulatory} = \frac{W_v - W_w - W_{ec}}{V_m - V_w - V_{ec}}$$

Where:

$VOC_{Regulatory}$	=	<u>Weight of VOC per liter of eCoating, less water and less Exempt Compounds</u>
W_v	=	<u>Weight of all volatile compounds, in grams</u>
W_w	=	<u>Weight of water, in grams</u>
W_{ec}	=	<u>Weight of Exempt Compounds, in grams</u>
V_m	=	<u>Volume of eCoating material, in liters</u>
V_w	=	<u>Volume of water, in liters</u>
V_{ec}	=	<u>Volume of Exempt Compounds, in liters</u>

(ii) Actual VOC Content – The weight (in grams) of VOC per liter of wWood pProducts eCoating material is expressed as grams VOC per liter of material, and shall be calculated by the following equation:

$$VOC_{Actual} = \frac{W_v - W_w - W_{ec}}{V_m}$$

VOC_{Actual}	=	<u>Weight of VOC per liter of eCoating</u>
W_v	=	<u>Weight of all volatile compounds, in grams</u>
W_w	=	<u>Weight of water, in grams</u>
W_{ec}	=	<u>Weight of Exempt Compounds, in grams</u>
V_m	=	<u>Volume of eCoating material, including any added VOC-containing Solvents or reducers but excluding any colorant added to Tint the base in liters</u>

(5) VOC Composite Partial Vapor Pressure: [Derived from PCAPCD Rule 236 §250.]

$$PP_C = \frac{\sum_{i=1}^n (W_i)(VP_i)(MW_i)}{\frac{W_w}{MW_w} + \frac{W_e}{MW_e} + \sum_{i=1}^n WSUB \frac{i}{MW_i}}$$

Where:

<u>PP_c</u>	≡	<u>VOC composite partial pressure at 68 °F (20 °C), in mm Hg</u>
<u>W_i</u>	≡	<u>Weight of the “I”_{th} VOC compound, in grams</u>
<u>W_w</u>	≡	<u>Weight of water, in grams</u>
<u>W_e</u>	≡	<u>Weight of Exempt Compounds, in grams</u>
<u>MW_i</u>	≡	<u>Molecular weight of the “I”_{th} VOC compound, in (g/g-mole)</u>
<u>MW_w</u>	≡	<u>Molecular weight of water, in (g/g-mole)</u>
<u>MW_e</u>	≡	<u>Molecular weight of Exempt Compound, in (g/g-mole)</u>
<u>VP_i</u>	≡	<u>Vapor pressure of the “I”_{th} VOC compound at 68 °F (20 °C), in mm Hg</u>

(6) Control Device Efficiency shall be calculated using the following equation:

$$\text{Control Device Efficiency} = \frac{(W_c - W_a)}{W_c} \times 100$$

Where:

W_c ≡ Weight of VOC entering control device

W_a ≡ Weight of VOC discharged from control device

(7) Grams of VOC Per Liter of Coating Less Water and Less Exempt Compounds" (VOC Content) shall be calculated using the following equation:

$$G_v = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Where:

<u>G_v</u>	≡	<u>Grams of VOC per Liter of Coating Less Water and Less Exempt Compounds</u>
----------------------	---	---

<u>W_s</u>	=	<u>Weight of volatile compounds in grams</u>
<u>W_w</u>	=	<u>Weight of water in grams</u>
<u>W_{es}</u>	=	<u>Weight of Exempt Compounds in grams</u>
<u>V_m</u>	=	<u>Volume of material in liters</u>
<u>V_w</u>	=	<u>Volume of water in liters</u>
<u>V_{es}</u>	=	<u>Volume of Exempt Compounds in liters</u>

(8) Grams of VOC Per Liter of Material shall be calculated using the following equation:

$$G_v = \frac{W_s - W_w - W_{es}}{V_m}$$

Where:

G_v = Grams of VOC Per Liter of Coating Less Water and Less Exempt Compounds

W_s = Weight of volatile compounds in grams

W_w = Weight of water in grams

W_{es} = Weight of Exempt Compounds in grams

V_m = Volume of material in liters

(9) Overall Control Efficiency (C.E.) shall be calculated using the following equations: [Updated for consistency.]

$$Capture\ Efficiency\ (\%) = \left(\frac{W_c}{W_e} \right) \times 100$$

Where:

W_c = Weight of VOC entering control device

We

Weight of VOC emitted

$$\text{Control Device Efficiency (\%)} = \frac{(W_c - W_a)}{W_c} \times 100$$

Where:

<u>W_c</u>	<u>=</u>	<u>Weight of VOC entering control device</u>
<u>W_a</u>	<u>=</u>	<u>Weight of VOC discharged from the control device</u>

$$C.E. (\%) = \frac{(\text{Capture Efficiency}) \times (\text{Control Device Efficiency})}{100}$$

See SIP Table at <http://www.mdaqmd.ca.gov/>

~~[SIP Information: Approved: 08/18/98, 63 FR 44132, 40 CFR 52.220(c)(244)(i)(C); Approved 61 FR 18962, 04/30/96]~~

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Appendix “B”

Public Notice Documents

1. Proof of Publication – Daily Press, December 22, 2017
2. Proof of Publication – Riverside Press Enterprise, December 22, 2017

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PROOF OF PUBLICATION

(2015.5 C.C.P.)

**STATE OF CALIFORNIA,
County of San Bernardino**

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of the publisher of the DAILY PRESS, a newspaper of general circulation, published in the City of Victorville, County of San Bernardino, and which newspaper has been adjudicated a newspaper of general circulation by the Superior Court of the County of San Bernardino, State of California, under the date of November 21, 1938, Case number 43096, that the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

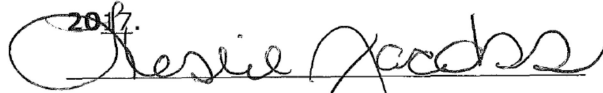
December 22

All in the year 2017.

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated this: 22nd day of December,

2017.



Signature

Leslie Jacobs

This space is the County Clerk's Filing Stamp

RECEIVED
MOJAVE DESERT AQMD
CLERK OF THE BOARD

JAN 03 2018

BY: 

Proof of Publication of NOTICE OF HEARING

NOTICE OF HEARING

NOTICE IS HEREBY GIVEN that the Governing Board of the Mojave Desert Air Quality Management District (MDAQMD) will conduct a public hearing on January 22, 2018 at 10:00 A.M. to consider the proposed amendment of Rule 102 - Definition of Terms, Rule 1114 - Wood Products Coating Operations, Rule 1157 - Boilers and Process Heaters, and Rule 1161 - Portland Cement Kilns.

SAID HEARING will be conducted in the Governing Board Chambers located at the MDAQMD offices 14306 Park Avenue, Victorville, CA 92392-2310 where all interested persons may be present and be heard. Copies of the proposed rules and the associated staff reports are on file and may be obtained from the Executive Office Manager at the MDAQMD Offices. Written comments may be submitted to Brad Polirez, APCO at the above office address. Written comments should be received no later than January 18, 2018 to be considered. If you have any questions regarding Rules 102 or 1114 you may contact Tracy Walters at (760) 245-1661 extension 6122 for further information. If you have questions regarding Rule 1157 you may con-

tion 5756. If you have questions regarding Rule 1161 you may contact Alan De Salvo at (760) 245-1661 extension 6726. Traducción esta disponible por solicitud.

The proposed amendment of Rule 102 - Definition of Terms is necessary to shift common definitions used in the MDAQMD rulebook to Rule 102, and to update them for consistency and clarity.

Rules 1114, 1157, and 1161 are proposed for amendment to satisfy 42 U.S.C. § 7511a (Federal Clean Air Act (FCAA) §182) which requires that ozone non-attainment areas implement Reasonably Available Control Technology (RACT) for sources that are subject to Control Techniques Guidelines (CTG) and for major sources of ozone precursors.

Pursuant to the California Environmental Quality Act (CEQA) the MDAQMD has determined that a Categorical Exemption (Class 8 - 14 Cal. Code Reg §15308) applies and has prepared a Notice of Exemption for this action.

Published in the
Daily Press
December 22, 2017
(F-66)

THE PRESS-ENTERPRISE

1825 Chicago Ave, Suite 100
Riverside, CA 92507
951-684-1200
951-368-9018 FAX

PROOF OF PUBLICATION (2010, 2015.5 C.C.P)

Publication(s): The Press-Enterprise

PROOF OF PUBLICATION OF


Ad Desc.: /

I am a citizen of the United States. I am over the age of eighteen years and not a party to or interested in the above entitled matter. I am an authorized representative of THE PRESS-ENTERPRISE, a newspaper in general circulation, printed and published daily in the County of Riverside, and which newspaper has been adjudicated a newspaper of general circulation by the Superior Court of the County of Riverside, State of California, under date of April 25, 1952, Case Number 54446, under date of March 29, 1957, Case Number 65673, under date of August 25, 1995, Case Number 267864, and under date of September 16, 2013, Case Number RIC 1309013; that the notice, of which the annexed is a printed copy, has been published in said newspaper in accordance with the instructions of the person(s) requesting publication, and not in any supplement thereof on the following dates, to wit:

12/22/2017

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Date: December 22, 2017
At: Riverside, California


Legal Advertising Representative, The Press-Enterprise

MOJAVE DESERT AQMD
14306 PARK AVE
ATTN: D. HERNANDEZ
VICTORVILLE, CA 92392

Ad Number: 0011052493-01

P.O. Number:

Ad Copy:

NOTICE OF HEARING

NOTICE IS HEREBY GIVEN that the Governing Board of the Mojave Desert Air Quality Management District (MDAQMD) will conduct a public hearing on January 22, 2018 at 10:00 A.M. to consider the proposed amendment of Rule 102 - Definition of Terms, Rule 1114 - Wood Products Coating Operations, Rule 1157 - Boilers and Process Heaters; and Rule 1161 - Portland Cement Kilns.

SAID HEARING will be conducted in the Governing Board Chambers located at the MDAQMD offices 14306 Park Avenue, Victorville, CA 92392-2310 where all interested persons may be present and be heard. Copies of the proposed rules and the associated staff reports are on file and may be obtained from the Executive Office Manager at the MDAQMD Offices. Written comments may be submitted to Brad Poliriz, APCO at the above office address. Written comments should be received no later than January 16, 2018 to be considered. If you have any questions regarding Rules 102 or 1114 you may contact Tracy Walters at (760) 245-1661 extension 6122 for further information. If you have questions regarding Rule 1157 you may contact Michelle Zumwalt (760) 245-1661 extension 5756. If you have questions regarding Rule 1161 you may contact Alan De Salvia at (760) 245-1661 extension 6726. Traducción esta disponible por solicitud.

The proposed amendment of Rule 102 - Definition of Terms is necessary to shift common definitions used in the MDAQMD rulebook to Rule 102, and to update them for consistency and clarity.

Rules 1114, 1157, and 1161 are proposed for amendment to satisfy 42 U.S.C. §57511a (Federal Clean Air Act (FCAA) §182) which requires that ozone non-attainment areas implement Reasonably Available Control Technology (RACT) for sources that are subject to Control Techniques Guidelines (CTG) and for major sources of ozone precursors.

Pursuant to the California Environmental Quality Act (CEQA) the MDAQMD has determined that a Categorical Exemption (Class 8 - 14 Cal. Code Reg §15306) applies and has prepared a Notice of Exemption for this action.

12/22

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MOJAVE DESERT AQMD
CLERK OF THE BOARD

JAN 03 2018

BY 

Appendix “C”

Public Comments and Responses

1. USEPA comments Re: MDAQMD Rule 1114, 12/22/17

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Tracy Walters

From: LEVIN, NANCY <Levin.Nancy@epa.gov>
Sent: Friday, December 22, 2017 10:23 AM
To: Tracy Walters; Alan De Salvio
Cc: Lo, Doris; Bushey, Douglas; Law, Nicole
Subject: RE: MDAQMD Rule 1114

Dear Alan and Tracy,

Thank you for the opportunity to comment on draft Rule 1114 – Wood Products Coating Operations. We have not yet completed our review of Rule 1114. However, we appreciated your time this week to talk about some initial issues/questions we've identified so far regarding exemptions. Per your request, we also are providing you initial comments on an additional exemption and some of the rule limits (See below). Please feel free to contact me with any questions at 415-972-3848. We look forward to providing you a comprehensive list of comments once we've fully reviewed the rule.

Thank you,
Nancy Levin

1. Section D.2. Exemptions for Custom Replica Furniture – The 11/15/17 draft rule includes an exemption for Custom Replica Furniture. We have reviewed other SIP-approved rules for the wood products coating category. Most other rules (e.g., San Diego 67.12, Placer 236, South Coast 1136, Ventura 74.30) rules do not appear to exempt custom replica furniture. For stringency purposes, we recommend either removing exemption D.2 for custom replica furniture, further limiting the exemption, or explaining why this exemption is consistent with RACT for the Mojave Desert.
2. In our preliminary review of MD Rule 1114 Table 1 and Table 2, we've reviewed other wood coating rules and in some cases found more stringent limits.
 - a. Sealers – In Table 1, the limit is 275 g/L, which is generally consistent with most rules wood coating rules (some have a more stringent limit of 240 g/L). However, the rule also provides that the sealer limit can be up to 680 g/L provided the topcoat used on the same wood product does not exceed 275 g/L (See (C)(1)(b)). While Placer Rule 236 rule contains a similar provision, no other wood coating rules we have reviewed appear to contain this provision. For stringency, we recommend deleting (C)(1)(b).
 - b. Low-Solids Stains, Toners and Washcoats – In Table 2, the limit is 700 g/L. Most other rules we have reviewed contain a limit of 480 g/L. We recommending lowering the limit to 480 g/L.
 - c. High Solids Stains – In Table 1, the limit is 350 grams per liter (g/L). In reviewing other wood coating rules we find that some rules contain a 350 g/L limit and some contain a limit of 240 g/L. We recommend considering lowering the limit to 240 g/L if feasible at this time.

Nancy Levin | 415-972-3848 | Rules and Planning
Air Division | Region IX | U.S. Environmental Protection Agency

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1. District Response to USEPA Comment, 12/22/17

1. Exemption removed as suggested. Other recently approved SIP-approved rules do not contain this exemption. A similar exemption in SCAQMD Rule 1136 was only applicable through July 1998 so removal will maintain consistency between the adjacent Districts.
- 2a. This proposed provision was removed as suggested.
- 2b. The limit for Low-Solids Stains, Toners and Washcoats was adjusted from 700 g/L to 480 g/L as suggested.
- 2c. The limit for High-Solids Stains was not reduced. The limit in adjacent SCAQMD contains the same limit of 350 g/L in Rule 1136. Placer County APCD TSD for Rule 236, October 2011, states that rule provisions meet RACT, and again mentions that industry was never able to comply with the limit of 240 g/L USEPA suggests be adopted.

Please note that other rule changes were made as discussed in conference call between USEPA and MDAQMD on 12/21/2017. These changes have been noted in the rule as *[italicized]* text.

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Appendix “D”
California Environmental Quality Act
Documentation

1. Notice of Exemption – San Bernardino County
2. Notice of Exemption – Riverside County

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Mojave Desert Air Quality Management District

14306 Park Avenue, Victorville, CA 92392-2310

760.245.1661 • fax 760.245.2699

NOTICE OF EXEMPTION

Visit our web site: <http://www.mdaqmd.ca.gov>

TO: County Clerk

FROM: Mojave Desert

San Bernardino County Air Quality Management District

385 N. Arrowhead, 2nd Floor 14306 Park Ave

San Bernardino, CA 92415 Victorville, CA 92392-2310

☒ MDAQMD Clerk of the Governing Board

PROJECT TITLE: Amendment of Rule 1114 – *Wood Products Coating Operations*.

PROJECT LOCATION – SPECIFIC: San Bernardino County portion of the Mojave Desert Air Basin and Palo Verde Valley portion of Riverside County.

PROJECT LOCATION – COUNTY: San Bernardino and Riverside Counties

DESCRIPTION OF PROJECT: The proposed amendment of Rule 1114 – *Wood Products Coating Operations* will satisfy 42 U.S.C. §§7511a (Federal Clean Air Act (FCAA) §182) which requires that ozone non-attainment areas implement Reasonably Available Control Technology (RACT) for sources that are subject to Control Techniques Guidelines (CTG) documents issued by United States Environmental Protection Agency (USEPA) for “major sources” of Volatile Organic Compounds (VOCs) and oxides of nitrogen (NO_x) which are ozone precursors. The proposed amendment of Rule 1114 also satisfies the provisions of former Health & Safety Code (H&S Code) §39614(d) (expired by its own terms on January 1, 2011) which requires the adoption of certain control measures for Particulate Matter (PM) from a list promulgated by the California Air Resources Board (CARB).

NAME OF PUBLIC AGENCY APPROVING PROJECT: Mojave Desert AQMD

NAME OF PERSON OR AGENCY CARRYING OUT PROJECT: Mojave Desert AQMD

EXEMPT STATUS (CHECK ONE)

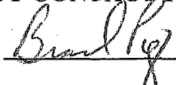
Ministerial (Pub. Res. Code §21080(b)(1); 14 Cal Code Reg. §15268)

Emergency Project (Pub. Res. Code §21080(b)(4); 14 Cal Code Reg. §15269(b))

☒ Categorical Exemption – Class 8 (14 Cal Code Reg. §15308)

REASONS WHY PROJECT IS EXEMPT: The proposed amendments to Rule 1114 are exempt from CEQA review because the amendments will not create any adverse impacts on the environment. The proposed rule amendments are more stringent than the previous rule version. Because there is no potential that the amendments might cause the release of additional air contaminants or create any adverse environmental impacts, a Class 8 categorical exemption (14 Cal. Code Reg. §15308) applies.

LEAD AGENCY CONTACT PERSON: Brad Poiriez **PHONE:** (760) 245-1661

SIGNATURE:  **TITLE:** Executive Director **DATE:** January 22, 2018

DATE RECEIVED FOR FILING:

City of Adelanto	Town of Apple Valley	City of Bartow	City of Blythe	City of Hesperia	City of Needles	County of Riverside	County of San Bernardino	City of Twentynine Palms	City of Victorville	Town of Yucca Valley
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Mojave Desert Air

14306 Park Ave

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NOTICES OF EXEMPTION
CLERK OF THE BOARD

FEB 05 2018

FILED / POSTED

County of Riverside
Peter Aldana
Assessor-County Clerk-Recorder

E-201800086
01/31/2018 01:33 PM Fee: \$ 50.00
Page 1 of 1

Removed: By: Deputy

TO: Clerk/Recorder
Riverside County
3470 12th St.
Riverside, CA 92501

FROM: Mojave Desert
Brad Poiriez, Executive Director
Air Quality Management District
14306 Park Ave
Victorville, CA 92392-2310

☒ MDAQMD Clerk of the Governing Board

PROJECT TITLE: Amendment of Rule 1114 -- *Wood Products Coating Operations*.

PROJECT LOCATION - SPECIFIC: San Bernardino County portion of the Mojave Desert Air Basin and Palo Verde Valley portion of Riverside County.

PROJECT LOCATION - COUNTY: San Bernardino and Riverside Counties

DESCRIPTION OF PROJECT: The proposed amendment of Rule 1114 -- *Wood Products Coating Operations* will satisfy 42 U.S.C. § 7511a (Federal Clean Air Act (FCAA) § 182) which requires that ozone non-attainment areas implement Reasonably Available Control Technology (RACT) for sources that are subject to Control Techniques Guidelines (CTG) documents issued by United States Environmental Protection Agency (USEPA) for "major sources" of Volatile Organic Compounds (VOCs) and oxides of nitrogen (NO_x) which are ozone precursors. The proposed amendment of Rule 1114 also satisfies the provisions of former Health & Safety Code (H&S Code) § 39614(d) (expired by its own terms on January 1, 2011) which requires the adoption of certain control measures for Particulate Matter (PM) from a list promulgated by the California Air Resources Board (CARB).

NAME OF PUBLIC AGENCY APPROVING PROJECT: Mojave Desert AQMD

NAME OF PERSON OR AGENCY CARRYING OUT PROJECT: Mojave Desert AQMD

EXEMPT STATUS (CHECK ONE)

Ministerial (Pub. Res. Code § 21080(b)(1); 14 Cal Code Reg. § 15268)

Emergency Project (Pub. Res. Code § 21080(b)(4); 14 Cal Code Reg. § 15269(b))

☒ Categorical Exemption - Class 8 (14 Cal Code Reg. § 15308)

REASONS WHY PROJECT IS EXEMPT: The proposed amendments to Rule 1114 are exempt from CEQA review because the amendments will not create any adverse impacts on the environment. The proposed rule amendments are more stringent than the previous rule version. Because there is no potential that the amendments might cause the release of additional air contaminants or create any adverse environmental impacts, a Class 8 categorical exemption (14 Cal. Code Reg. § 15308) applies.

LEAD AGENCY CONTACT PERSON: Brad Poiriez **PHONE:** (760) 245-1661

SIGNATURE:  **TITLE:** Executive Director **DATE:** January 22, 2018

DATE RECEIVED FOR FILING:

City of Adelanto Town of Apple Valley City of Barstow City of Blythe City of Hemet City of Needles County of Riverside County of San Bernardino City of Twentynine Palms City of Victorville Town of Yucca Valley

Appendix “E”

Bibliography

The following documents were consulted in the preparation of this staff report.

1. San Diego County Air Pollution Control District Rule 67.11 – Wood Products Coating Operations, 6/12/12
2. United States Environmental Protection Agency Region IX Air Division Technical Support Document for EPA’s Direct Final Rulemaking for the California State Implementation Plan San Diego County Air Pollution Control District Rule 67.11, Wood Products Coating Operations, February 2013.
3. Placer County Air Pollution Control District Rule 236 – *Wood Products Coating Operations*, 10-14-10.
4. United States Environmental Protection Agency Region IX Air Division Technical Support Document for EPA’s Direct Final Rulemaking for the California State Implementation Plan Placer County Air Pollution Control District Rule 236, Wood Products Coating Operations, October 2011.
5. *Control of Volatile Organic Emissions from Wood Furniture Manufacturing Operations*, EPA-453/R-96-007 April 1996.
6. *Control Techniques Guidelines for Flat Wood Paneling Coatings*, EPA 453/R-06-004 September 2006
7. *Control Techniques Guidelines: Industrial Cleaning Solvents*, EPA 453/R-06-001 September 2006
8. *Control of Volatile Organic Emissions from Existing Stationary Sources – Volume VII: Factory Surface Coating of Flat Wood Paneling*, EPA 450/2-78-032 June 1978

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